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**Concentrations of Polycyclic
Aromatic Hydrocarbons (PAHs),
Polychlorinated Biphenyls (PCBs), and
Organochlorinated Pesticides (OCPs)
in the Kenai River, Alaska: 2001-2005**

-- A Data Report

June 2006

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Concentrations of Polycyclic Aromatic Hydrocarbons (PAHs), Polychlorinated Biphenyls
(PCBs), and Organochlorinated Pesticides (OCPs) in the Kenai River, Alaska: 2001-2005 - -
A Data Report

by

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ABSTRACT

The Kenai River in Alaska is one of the most popular salmon fishing rivers in the world. Heavy recreational boating use and attendant urban development have raised concerns about pollution in the river. Among the most deleterious of potential contaminants are the polycyclic aromatic hydrocarbons (PAHs), polychlorinated biphenyls (PCBs), and organochlorine pesticides (OCPs). These three types of chemicals are capable of persisting in sediments and fish tissues for many years, making them available to higher trophic level predators. These compounds are also among the most toxic to aquatic organisms and humans. Between 2001 and 2005, the Alaska Fisheries Science Center deployed passive samplers to assess the origin and variation in non-point source delivery of these pollutants to the river. Possible sources included recreational boating, street runoff, and remote delivery through the atmosphere and returning fish carcasses. This data report presents the concentrations of 39 PAH analytes, 40 PCB congeners, and 24 OCPs detected in 432 samplers deployed for 21-30 days in the Kenai River at a variety of locations and seasons. In addition, we also report concentrations of PCBs and OCPs from eggs and muscle tissues of 10 returning Chinook salmon (*Oncorhynchus tshawytscha*). Synthesis and interpretation of this data will be available shortly from 2 publications: Moles et al. (in press) and Rice et al. (in preparation).

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INTRODUCTION

Of contaminants that can enter a watershed from human activity, organic pollutants such as polycyclic aromatic hydrocarbons (PAHs), polychlorinated biphenyls (PCBs), and organochlorine pesticides (OCPs) are among the most toxic to aquatic life and the most persistent. Released into the environment through either combustion or weathering of oil products, some PAHs are known carcinogens and mutagens (Barron et al. 2004). Polycyclic aromatics, because they are larger and heavier than monocyclic aromatics, are released from oil films and droplets at progressively slower rates with increasing molecular weight and can persist in sediments and tissues for several years (Short et al. 2004). Salmon embryos that accumulated PAHs from aqueous concentrations as low as 1 ng/g (TPAH) had reduced survival and growth, probably as the result of damage during early embryonic development (Heintz et al. 2000).

By far the most persistent pollutants in the environment are the organochlorides such as polychlorinated biphenyls (PCB), chlorinated pesticides, and industrial byproducts such as dioxins and furans. These compounds are potential neurotoxins and endocrine disruptors in fish and humans that can persist in the environment for decades (AMAP 2002). Organochlorides can be transported atmospherically from remote industrialized sites and find their way via currents and rain to rural locations, especially in the higher latitudes (Simonich and Hites 1995). Organochlorides can also concentrate to high levels in the lipid-rich tissues of salmon (*Oncorhynchus* spp.) from trace quantities in the ocean. These chemicals are returned to the natal stream when the salmon spawn and die, increasing the loads in the sediments by as much as seven-fold (Krummel et al. 2003).

The best way to assess spatial and temporal changes in the concentrations of freely dissolved organic pollutants in water is through the use of passive samplers. The proven ability of these devices to concentrate trace quantities from the water and integrate exposure over time improves the detection of PAHs and permits capture of intermittent pulses of contaminants (Prest et al. 1995, Carls et al. 2004). Between 2001 and 2005, the National Marine Fisheries Service and the Kenai Watershed Forum deployed 432 passive samplers in the Kenai River in Alaska to determine the source and variation of PAHs, PCBs, and OCPs in the river. In addition, eggs and muscle tissue from 10 Chinook salmon (*O. tshawytscha*) females returning to the river to spawn were examined for PCB and OCP levels.

Study Site

The 132 km-long Kenai River (latitude 60°33'N, longitude 151°16'W) in southcentral Alaska is one of the most productive salmon streams in the world, with a watershed of 5054 km². Four species of anadromous salmon: Chinook, coho (*O. kisutch*), sockeye (*O. nerka*), and pink (*O. gorbuscha*) salmon as well as rainbow trout (*O. mykiss*) return to the river from mid-May through September. Pink salmon are available in even years only due to the nature of their life cycle. Dolly Varden (*Salvelinus malma*) and lake trout (*S. namaycush*) are year-round residents in the watershed. Dubbed the premiere fishing “hotspot” in North America by *Field and Stream Magazine* in 2004, the Kenai River produces some of the largest runs of Pacific salmon on the continent. In 2004, 1,384,587 sockeye salmon and 68,640 Chinook salmon returned to the river.

MATERIALS AND METHODS

From 2001 through 2005, passive sampling devices were deployed at a variety of locations along the Kenai River to assess spatial and temporal changes in PAH, PCB, and OCP input. These passive samplers, variously referred to as polyethylene membrane devices (PEMDs) or low-density polyethylene devices (LDPEs), are similar to the commercially available semi-permeable membrane devices (SPMDs) used routinely in water-quality monitoring. Lacking a central bag of lipid, these devices are simpler and less expensive to deploy and analyze. The PEMDs are a single strip of low-density polyethylene measuring 2.6 cm × 50 cm × 88 cm serpentine around aluminum nails in an aluminum pipe (11 cm outside diameter × 6 cm depth) with perforated aluminum end caps that allowed the water to flow freely past the strips. Organic contaminants were sequestered in the polyethylene matrix (Carls et al. 2004) inside the perforated canisters.

The polyethylene membranes inside the canisters were prepared by sonic extraction in pentane followed by a rinse with pentane during removal from the sonic bath. All canisters, screens, tools, and associated hardware were washed with soap and water and rinsed with chromatography grade methylene chloride prior to use. Some samplers from each batch were retained in the laboratory to serve as laboratory blanks. During each deployment at least one sampler (field blank) was exposed to air at one of the sampling sites for approximately 1 minute. The passive sampling devices were wrapped in two separate layers of hydrocarbon-clean

aluminum foil plus and double-bagged in plastic during transport to and from the field to prevent passive sampling of air (Huckins et al. 1996).

Following retrieval, membranes were removed from the canisters in the laboratory using hydrocarbon-free forceps. The membranes were stored in hydrocarbon-free glass jars with aluminum foil-lined lids and placed in a -20° C freezer until extraction. In the laboratory, the membranes were extracted and analyzed as described by Carls et al. (2004). Extracts were analyzed by gas chromatography equipped with a mass selective detector, and PAH concentrations were determined by the internal standard method (Short et al. 1996). Concentrations of total PAH were calculated by summing the concentration of 39 analytes listed in Table 1. Total PAHs extracted from the device were converted to ng/g values based on an average weight of 10 membranes determined previously (Carls et al. 2004).

Samplers were deployed at 28 locations along the river. Details about sampling locations can be found in Moles et al. (in press). Five of these sites (Airport Creek, Kenai Dock, Sonar, Soldotna Creek, and 44.5 Mile) were sampled most months of the year, and the remaining sites were sampled in April and July of each year. In addition, passive samplers were deployed at several locations in a tributary stream that drained an area near the airport in the town of Kenai (Airport Creek) to determine the source of the high concentrations of hydrocarbons in the main stem of this tributary stream. Samplers were also deployed in the local settling basins that collected local street runoff from the town of Soldotna. Deployment was typically from 21 to 30 days. Given the difficult logistics of sampling in a subarctic river during the winter months,

samplers were not always deployed at all sites during the winter. Samplers were cabled from shore to avoid the contamination inherent in deploying from a motorboat with carriers suspended less than 1 m below the water surface.

In 2002, PEMD samplers were also deployed for 21-30 days at some locations along the river in tandem with the PAH samplers to determine what concentrations of an array of pesticides or PCBs were present in the river. These samplers were identical to the PAH samplers but method of analysis differed. The dates were chosen to coincide with the beginning and end of runoff from snowmelt (April, July, and August). Analysis of each monthly set of deployed PEMDs also included one or two field blanks, one laboratory blank, one solvent method blank, one spiked laboratory blank, and one spiked solvent method blank. In the laboratory, an internal standard (PCB 103) was added to all samples and a solution containing a suite of chlorinated analytes was added to the two spiked samples. The samples were then extracted in 1:1 methylene chloride:pentane by sonication. The extracts were eluted through silica columns using 1:1 methylene chloride: pentane. The cleaned up extracts were concentrated into 100 μ L of isoctane, and an instrument internal standard (tetrachloro-m-xylene) was added.

In addition to the passive samplers, 10 adult female Chinook salmon were captured upon their return to the river. The fish were taken throughout the month of July to ensure maximal variation. Each of the 10 fish was of a different size to ensure a wide selection of ages. Upon capture, eggs and 2 g of flesh were taken from each fish for chlorinated hydrocarbon analysis using proper techniques to avoid contamination of the samples. Each fish was aged using scale

analysis to determine if the length of ocean residency increased the concentration of OCPs in either tissue. The passive samplers and frozen tissue samples were sent to the Northwest Fisheries Science Center in Seattle, Washington, for analysis using the gas chromatography/mass spectrometry techniques described in detail in Sloan et al. (2004). The PCB congeners and pesticides measured are identified in Table 1. . The PAH data are presented in Table 2 and the PCB and OCP data are presented in Table 3.

This is a data report listing the results of NMFS's work on the Kenai River between 2001 and 2005. This report contains no attempt to synthesize, summarize, or interpret the data. Rather, that task has been deferred to two publications that are currently in press or in preparation:

Moles, A., L. Holland, and O. Andersson. In press. Assessment of the significance of direct and indirect pollution inputs to a major salmon-producing river using polyethylene membrane devices. Environ. Toxicol. Chem. 25(8):XX-XXX.

Rice, S. D., and A. Moles. In prep. Assessing the potential for remote delivery of persistent organic pollutants to the Kenai River in Alaska. Alaska Fisheries Research Bulletin.

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Prest H. F., J. N. Huckins, J. D. Petty, S. Herve, J. Paasivirta, and P. Heinonen. 1995. A survey of recent results in passive sampling of water and air by semipermeable membrane devices. Mar. Poll. Bull. 30:543-554.

Short, J.W., T. J. Jackson, M. L. Larsen, and T. L. Wade. 1996. Analytical methods used for the analysis of hydrocarbons in crude oil, tissues, sediments, and seawater collected for the Natural Resources Damage Assessment of the *Exxon Valdez* oil spill. American Fisheries Society Symposium 18:140-148.

Short, J. W., M. R. Lindeberg, P. M. Harris, J. M. Maselko, J. J. Pella, and S. D. Rice. 2004. Estimate of oil persisting on beaches of Prince William Sound, 12 years after the *Exxon Valdez* oil spill. Environ. Sci. Technol. 38:19-25.

Simonich, S., and R. Hites. 1995. Global distribution of persistent organic contaminants. Science 269:1851-1854.

Sloan, C. A., D. W. Brown, R. W. Pearce, R. H. Boyer, J. L. Bolton, D. G. Burrows, D. P. Herman, and M. M. Krahm. 2004. Extraction, cleanup, and gas chromatography/mass spectroscopy analysis of sediments and tissues for organic contaminants. U. S. Dep. Commer., NOAA Tech. Memo.NMFS-NWFSC-59, 47 p.

Table 1. - - Polycyclic aromatic hydrocarbon (PAH) and organochlorinated pesticides (OCP) analytes and their abbreviations as used in this report

naphthalenes	N0		
C-1 naphthalenes	N1	Polychlorobiphenal congeners	PCBs
C-2 naphthalenes	N2	17, 18, 28, 31, 33, 44, 49, 52, 66, 70	
C-3 naphthalenes	N3	74, 82, 87, 90, 95, 99, 101, 105, 110	
C-4 naphthalenes	N4	118, 128, 132, 138, 149, 151, 153	
biphenyl	BPH	156, 158, 159, 163, 164, 170, 171	
acenaphthylene	ACY	177, 180, 182, 183, 187, 190, 191	
acenaphthene	ACE	194, 195, 199, 205, 206, 208, 209	
fluorene	F0		
C-1 fluorenes	F1	hexachlorobenzene	HCB
C-2 fluorenes	F2		
C-3 fluorenes	F3	alpha hexachlorohexane	HCH
dibenzothiophene	D0	beta hexachlorohexane	
C-1 dibenzothiophenes	D1	lindane	
C-2 dibenzothiophenes	D2		
C-3 dibenzothiophenes	D3	aldrin	aldrin
phenanthrene	P0		
C-1 phenanthrenes/anthracenes	P1	dieldrin	dieldrin
C-2 phenanthrenes/anthracenes	P2		
C-3 phenanthrenes/anthracenes	P3	endosulfane I	endosulfans
C-4 phenanthrenes/anthracenes	P4	endosulfan II	
anthracene	ANT	endosulfan sulfate	
fluoranthene	FLA		
pyrene	PYR	mirex	mirex
C-1 fluoranthenes/pyrenes	C1F		
benz-a-anthracene	BAA	heptachlor	chlordanes
chrysene	C0	heptachlor epoxide	
C-1 chrysenes	C1	oxy-chlordane	
C-2 chrysenes	C2	gamma chlordane	
C-3 chrysenes	C3	alpha chlordane	
C-4 chrysenes	C4	trans-nonachlor	
benzo-b-fluoranthene	BbF	cis-nonachlor	
benzo-k-fluoranthene	BkF	nonachlor III	
benzo-e-pyrene	BEP		
benzo-a-pyrene	BAP	o,p'-DDE	DDT
perylene	PER	p,p'-DDE	
indeno-123-cd-pyrene	IDP	p,p'-DDD	
dibenzo-a,h-anthracene	DBZ	o,p'-DDT	
benzo-g,h,i-perylene	BzP	p,p'-DDT	

Table 2

Polycyclic aromatic hydrocarbon concentrations in low-density polyethylene devices from the Kenai River, 2000-2005. Note: SIN = Sample Identification Number; Sample Description = Location where the sample was obtained; TPAH (ng/device) = sum of PAH analytes eluted from passive samplers; TPAH (ng/g) = sum of PAH analytes per gram of polyethylene membrane. Concentrations are reported in ng/g (parts per billion).

Table 2

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Table 2

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Table 2

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Table 2

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Table 2

Table 2

Table 2

SIN Sample Description	1208204 ADF&G Sonar	1208310 ADF&G Sonar	1301304 ADF&G Sonar	1301403 ADF&G Sonar	1302704 ADF&G Sonar	1302814 ADF&G Sonar	1304107 ADF&G Sonar	1304304 ADF&G Sonar
#Days								
Deployed	27	23	20	30	33	33	26	35
Month	Feb	Apr	Mar	May	Jun	Jul	Aug	Sep
Year	2002	2002	2002	2002	2002	2002	2002	2002
TPAH (ng/device)	193.71	297.05	124.69	199.82	150.90	607.85	287.06	121.03
TPAH (ng/g)	90.45	134.44	56.43	106.22	77.12	279.84	133.33	58.49
N0	0.00	27.56	4.99	0.00	0.00	0.00	0.00	0.00
N1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
N2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
N3	0.00	5.22	0.00	0.00	0.00	0.00	0.00	0.00
N4	8.92	39.08	8.41	0.00	0.00	0.00	0.00	0.00
BPH	0.00	5.06	3.86	4.88	1.65	0.00	0.00	0.00
ACY	22.70	54.04	28.70	26.55	18.21	14.27	11.23	4.96
ACE	5.62	16.10	9.14	8.34	22.58	71.51	40.43	18.69
F0	0.00	11.54	0.00	0.00	0.00	0.00	0.00	0.00
F1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
F2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
F3	0.00	23.09	0.00	0.00	0.00	0.00	0.00	0.00
D0	14.68	40.80	9.15	22.03	12.42	10.25	9.74	7.79
D1	40.76	22.91	10.67	32.68	26.81	109.02	45.88	23.51
D2	14.42	9.67	0.00	8.02	12.14	110.97	26.30	6.63
D3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
P0	1.46	0.00	0.00	2.10	1.30	1.52	1.30	0.00
P1	0.00	1.50	2.32	2.83	2.70	8.00	2.76	0.00
P2	2.89	2.70	3.38	4.81	2.11	9.64	4.77	2.33
P3	4.16	8.15	5.63	8.87	0.00	0.00	0.00	0.00
P4	3.13	1.66	1.98	4.53	1.82	3.53	1.91	1.40
ANT	16.10	9.32	11.13	17.25	14.41	21.18	14.58	9.79
FLA	19.19	8.71	10.80	18.60	17.95	111.17	55.84	17.87
PYR	9.67	6.43	5.77	15.21	6.04	59.02	20.41	7.79
C1F	0.00	1.34	1.31	1.48	0.00	6.02	1.83	0.00
BAA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
C0	15.99	7.07	5.78	10.09	6.34	9.07	7.95	6.14
C1	7.36	3.42	2.17	13.42	4.83	32.02	18.72	11.29
C2	7.16	3.63	3.30	4.17	3.05	27.90	13.35	4.25
C3	0.96	0.00	0.00	1.60	0.00	0.00	0.61	0.00
C4	1.67	0.00	2.05	1.75	0.00	3.53	4.61	0.00
BbF	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
BkF	0.00	0.00	0.00	0.00	0.00	2.74	2.25	0.00
BEP	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
BAP	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PER	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
IDP	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DBZ	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
BzP	0.00	0.00	0.00	0.00	0.00	0.00	4.49	0.00

Table 2

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Table 2

SIN Sample Description #Days	1603305 ADF&G Sonar	1400103 Airport S. Fork #1	1400104 Airport N. Fork #1	1400106 Airport N. Fork #2	1400107 Airport S. Fork #2	1400204 Airport S. Fork #1	1400205 Airport N. Fork #1	1400206 Airport N. Fork #2
Deployed Month	26 Jul	23 Feb	23 Feb	23 Feb	23 Feb	23 Mar	23 Mar	23 Mar
Year	2005	2003	2003	2003	2003	2003	2003	2003
TPAH (ng/device)	817.39	25445.62	4515.23	6898.14	5721.70	3603.68	852.10	1091.07
TPAH (ng/g)	371.20	11515.94	2043.46	3121.90	2589.47	1630.92	385.63	493.79
N0	0.00	7.78	38.25	66.18	1.21	73.57	56.26	90.10
N1	0.00	20.23	41.03	30.23	3.06	6.44	0.00	0.00
N2	0.00	204.86	170.67	185.06	75.05	33.93	6.60	8.17
N3	0.00	788.11	299.92	619.73	262.98	133.15	23.68	60.94
N4	98.89	770.35	213.17	447.79	245.48	77.32	0.00	59.52
BPH	0.00	4.78	3.86	2.76	0.00	0.00	0.00	0.00
ACY	0.00	3.86	5.40	0.99	0.23	0.00	0.00	0.00
ACE	0.00	131.00	19.70	23.37	2.09	6.77	3.92	1.75
F0	0.00	286.19	44.99	56.73	13.21	22.22	8.40	5.10
F1	0.00	218.37	77.92	133.98	50.22	33.26	8.47	15.71
F2	59.37	455.72	164.19	269.61	137.89	78.06	30.05	33.59
F3	64.37	630.53	200.45	228.79	267.10	89.75	0.00	30.04
D0	0.00	321.04	42.40	51.83	35.34	34.27	7.47	7.27
D1	7.43	433.11	122.06	151.24	194.89	53.02	18.78	21.17
D2	0.00	802.14	260.45	309.08	385.75	110.49	39.35	44.43
D3	6.77	443.39	157.36	174.36	251.62	86.28	39.71	27.38
P0	0.00	3405.13	259.13	535.07	215.31	453.20	67.35	82.65
P1	8.00	2102.04	492.88	723.32	707.31	254.09	76.21	94.37
P2	181.17	1767.06	530.65	701.68	880.50	272.14	113.68	104.65
P3	229.66	992.61	340.87	351.55	525.11	145.47	101.97	75.95
P4	0.00	0.00	48.93	32.23	87.00	0.00	0.00	0.00
ANT	0.00	587.90	16.44	37.07	8.22	18.49	3.70	3.62
FLA	0.00	4053.21	204.80	627.25	270.54	640.11	70.89	125.97
PYR	74.17	3089.34	237.72	516.14	276.83	524.19	71.63	108.32
C1F	57.81	804.38	123.79	167.06	137.64	107.25	29.00	24.46
BAA	6.12	689.89	19.45	33.93	24.86	41.01	4.25	2.79
C0	14.15	979.57	111.60	191.69	202.72	137.28	25.87	26.65
C1	6.52	474.91	154.49	126.33	241.12	62.02	29.61	16.26
C2	0.00	122.40	75.15	33.02	141.06	16.14	0.00	0.00
C3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
C4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
BbF	0.00	276.55	9.78	15.48	16.63	40.15	6.25	4.62
BkF	0.00	156.88	7.18	13.40	12.01	27.82	3.58	2.26
BEP	0.00	169.29	17.57	26.16	37.55	5.88	0.00	0.00
BAP	0.00	120.77	0.00	0.00	0.00	10.58	0.00	0.00
PER	0.00	28.25	0.00	12.47	4.89	9.34	5.40	13.34
IDP	0.00	57.55	0.00	0.00	0.00	0.00	0.00	0.00
DBZ	0.00	7.00	0.00	0.00	0.00	0.00	0.00	0.00
BzP	2.96		2.56	6.25	0.00	0.00	0.00	0.00

Table 2

SIN Sample Description #Days	1400207 Airport Fork #3	1400208 Airport S. Fork #2	1400837 Airport S. Fork #1	1400838 Airport S. Fork #1	1401403 Airport S. Fork #1	1401404 Airport N. Fork #1	1401406 Airport N. Fork #2	1401407 Airport Fork #3
Deployed Month	23 Mar	23 Mar	46 Apr	46 Apr	22 May	22 May	22 May	22 May
Year	2003	2003	2003	2003	2003	2003	2003	2003
TPAH (ng/device)	374.09	504.28	4871.30	1895.53	2859.35	536.66	630.49	2426.50
TPAH (ng/g)	169.30	228.22	2204.61	857.86	1294.06	242.88	285.34	1098.16
N0	37.18	103.21	8.11	7.71	101.43	71.37	41.22	84.43
N1	0.00	0.00	0.00	5.48	1.06	0.00	0.00	95.72
N2	0.00	0.00	4.19	111.47	5.96	0.00	19.42	546.93
N3	19.50	35.47	94.83	118.58	56.33	6.57	68.75	825.79
N4	34.88	14.72	145.05	57.49	66.61	0.00	19.24	171.96
BPH	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.49
ACY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	14.91
ACE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
F0	1.14	0.00	0.00	3.01	0.00	0.00	0.00	14.84
F1	6.71	7.83	21.10	19.37	14.25	2.14	12.40	33.60
F2	19.02	0.00	86.32	45.56	47.80	0.00	20.91	91.61
F3	0.00	0.00	136.93	0.00	82.20	0.00	18.88	89.22
D0	2.03	3.14	10.09	7.59	7.00	0.00	5.73	4.28
D1	6.54	16.36	78.78	39.09	58.00	10.42	13.72	31.39
D2	11.03	26.63	252.60	126.55	140.76	35.31	23.43	92.91
D3	7.62	14.06	172.18	118.06	99.46	48.58	15.95	71.08
P0	31.79	29.85	188.02	62.53	106.92	10.19	31.27	26.16
P1	35.78	52.49	344.45	154.59	221.32	40.14	45.06	42.28
P2	33.25	55.06	500.57	257.86	297.59	64.40	50.04	66.33
P3	8.46	25.92	336.72	184.35	168.44	32.80	26.31	25.60
P4	0.00	0.00	24.08	14.49	36.34	3.24	4.17	2.90
ANT	0.00	0.00	7.71	3.39	2.64	7.41	1.86	0.00
FLA	44.67	46.98	803.85	119.34	429.97	36.51	63.92	24.81
PYR	47.14	38.93	745.91	143.11	313.59	46.01	48.77	21.95
C1F	7.69	10.47	194.63	66.82	90.61	20.30	12.26	6.36
BAA	0.00	0.00	30.69	2.51	8.88	0.00	0.00	0.00
C0	4.52	15.00	225.38	62.90	173.32	33.52	30.24	3.40
C1	3.05	8.17	159.00	85.84	119.65	16.60	19.46	0.00
C2	0.00	0.00	62.67	27.47	34.63	18.22	0.00	0.00
C3	0.00	0.00	0.00	0.00	2.44	7.06	0.00	0.00
C4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
BbF	0.00	0.00	58.00	12.18	46.81	0.00	6.82	0.00
BkF	0.00	0.00	60.71	6.16	24.66	0.00	0.00	0.00
BEP	0.00	0.00	77.15	15.41	37.38	0.00	2.66	0.00
BAP	0.00	0.00	8.68	4.16	11.47	0.00	0.00	0.00
PER	12.08	0.00	21.87	9.73	43.68	25.86	28.01	37.56
IDP	0.00	0.00	4.34	0.00	3.10	0.00	0.00	0.00
DBZ	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
BzP	0.00	0.00	6.70	2.74	5.04	0.00	0.00	0.00

Table 2

SIN Sample Description	1401408 Airport S. Fork #2	1401704 Airport S. Fork #1	1401705 Airport N. Fork #1	1401706 Airport Fork #3	1401707 Airport N. Fork #2	1401708 Airport S. Fork #2	1401907 Airport S. Fork #1	1401908 Airport N. Fork #1
#Days								
Deployed	22	29	28	29	29	29	30	30
Month	May	Jun	Jun	Jun	Jun	Jun	Jul	Jul
Year	2003	2003	2003	2003	2003	2003	2003	2003
TPAH (ng/device)	437.19	1951.27	6303.92	586.95	1234.52	2267.25	2900.54	760.27
TPAH (ng/g)	197.86	883.09	2852.97	265.64	558.71	1026.09	1312.70	344.08
N0	18.84	198.74	21.28	42.59	97.35	32.35	20.76	2.38
N1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
N2	0.00	17.68	15.73	72.02	25.03	23.28	15.90	0.00
N3	28.74	34.89	74.97	94.55	38.43	39.33	53.47	3.72
N4	19.41	60.75	131.32	35.12	26.33	51.49	98.03	28.80
BPH	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ACY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ACE	0.00	0.00	0.23	0.36	0.00	8.47	0.00	0.00
F0	0.00	0.66	6.13	5.38	2.34	14.17	5.95	0.00
F1	8.22	16.81	29.06	11.55	16.46	15.99	33.23	9.38
F2	13.05	41.15	116.87	19.66	26.15	52.63	93.94	23.19
F3	25.38	89.19	255.49	17.98	47.19	203.29	129.10	34.16
D0	2.72	10.09	27.99	4.08	10.50	44.86	10.80	5.17
D1	15.36	50.35	138.56	7.25	30.79	143.14	42.45	16.34
D2	27.04	121.43	329.20	17.34	56.74	200.13	108.57	36.81
D3	16.51	112.01	231.42	11.60	36.69	98.74	81.67	38.55
P0	18.84	50.46	310.41	24.09	66.00	210.70	77.53	25.11
P1	55.99	152.63	493.29	24.85	103.69	319.02	185.43	63.69
P2	62.35	235.66	644.26	23.40	113.93	303.70	276.21	93.79
P3	21.79	137.31	326.40	7.48	53.19	101.91	157.57	57.73
P4	3.91	34.54	84.04	0.00	13.17	16.04	14.77	7.61
ANT	0.00	0.00	9.20	2.07	0.00	4.43	0.00	0.00
FLA	22.86	98.77	999.33	29.64	138.69	105.41	383.83	60.35
PYR	19.21	136.80	704.14	30.76	106.32	99.25	340.50	75.50
C1F	7.95	65.94	212.82	6.76	27.70	30.99	96.10	30.39
BAA	0.00	1.00	25.35	0.00	0.00	0.00	35.28	0.00
C0	19.30	80.98	372.99	2.27	58.98	72.05	230.47	49.43
C1	14.33	94.38	208.94	0.00	38.72	46.14	108.28	40.79
C2	4.03	29.35	62.97	0.00	9.74	11.73	30.15	13.19
C3	0.00	2.71	4.20	0.00	0.00	0.00	0.00	0.00
C4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
BbF	0.00	13.44	115.84	0.00	13.96	4.98	58.85	8.02
BkF	0.00	7.76	104.34	0.00	6.42	3.48	37.95	1.95
BEP	0.00	18.89	104.99	0.00	5.61	5.85	69.33	8.07
BAP	0.00	4.18	15.32	0.00	0.00	0.00	18.69	0.00
PER	11.34	32.70	103.03	96.16	63.18	3.72	76.25	26.16
IDP	0.00	0.00	8.97	0.00	0.00	0.00	0.00	0.00
DBZ	0.00	0.00	1.93	0.00	0.00	0.00	0.00	0.00
BzP	0.00	0.00	12.93	0.00	1.23	0.00	9.48	0.00

Table 2

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SIN Sample Description #Days	1401909 Airport Fork #3	1401910 Airport N. Fork #2	1401911 Airport S. Fork #2	1402404 Airport S. Fork #1	1402405 Airport N. Fork #1	1402406 Airport Fork #3	1402407 Airport N. Fork #2	1402408 Airport S. Fork #2
Deployed Month	30 Jul	30 Jul	30 Jul	28 Aug	28 Aug	28 Aug	28 Aug	28 Aug
Year	2003	2003	2003	2003	2003	2003	2003	2003
TPAH (ng/device)	535.44	707.81	1732.72	7164.89	1102.66	324.86	684.60	1111.02
TPAH (ng/g)	242.33	320.33	784.18	3242.62	499.03	147.02	309.83	502.82
N0	7.32	0.00	0.00	0.00	0.00	0.00	0.00	0.00
N1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
N2	37.75	15.82	0.00	34.93	0.00	0.00	0.00	0.00
N3	81.33	45.21	13.38	635.03	12.09	39.18	18.67	3.94
N4	38.47	40.99	28.34	642.60	47.46	29.90	43.78	27.06
BPH	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ACY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ACE	0.00	0.00	27.66	0.00	0.00	0.00	0.00	0.00
F0	0.89	1.09	49.18	8.05	0.00	2.24	1.15	1.12
F1	11.90	18.19	16.35	152.77	21.02	10.89	17.03	13.17
F2	23.90	29.81	27.72	390.74	50.61	17.97	30.38	33.15
F3	20.24	26.31	67.07	348.98	63.76	15.81	25.74	97.30
D0	2.46	6.95	50.42	48.43	6.72	2.92	8.67	20.06
D1	5.77	16.83	62.17	257.98	29.74	7.01	20.35	60.80
D2	11.42	27.16	82.05	431.71	68.08	11.74	34.49	86.63
D3	7.90	17.95	40.43	316.82	60.45	9.01	20.87	48.56
P0	29.76	31.64	405.75	248.12	36.61	22.14	51.84	97.68
P1	26.53	61.08	165.87	676.97	113.41	29.47	71.10	170.82
P2	24.85	63.88	130.83	761.05	155.92	22.43	70.58	154.60
P3	0.00	31.13	50.24	350.78	88.40	10.04	34.81	52.22
P4	0.00	1.63	2.88	82.00	23.67	0.00	1.85	3.65
ANT	0.00	0.00	15.46	8.90	0.00	0.00	0.00	0.00
FLA	40.30	78.55	224.26	556.09	54.29	21.40	74.39	84.80
PYR	33.93	61.40	152.69	449.96	80.80	20.88	61.62	68.83
C1F	7.97	15.84	23.15	145.10	37.79	5.42	14.63	16.91
BAA	0.00	0.00	0.00	8.53	3.93	0.00	0.00	0.00
C0	5.21	32.27	51.17	192.45	46.05	4.59	31.35	43.47
C1	5.01	20.28	22.90	123.16	41.33	3.06	16.52	21.99
C2	0.00	5.34	4.52	36.36	12.17	0.00	4.46	4.28
C3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
C4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
BbF	0.00	6.13	6.62	88.35	12.07	0.00	0.00	0.00
BkF	0.00	2.84	0.00	32.34	0.00	0.00	0.00	0.00
BEP	0.00	6.05	4.71	65.65	5.98	0.00	0.00	0.00
BAP	0.00	0.00	0.00	16.22	0.00	0.00	0.00	0.00
PER	112.54	43.43	6.88	42.34	30.30	38.74	30.31	0.00
IDP	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DBZ	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
BzP	0.00	0.00	0.00	12.49	0.00	0.00	0.00	0.00

Table 2

Table 2

Table 2

Table 2

SIN Sample Description #Days	1106518 Airport Creek	1200102 Airport Creek	1200112 Airport Creek	1200402 Airport Creek	1200604 Airport Creek	1200605 Airport Creek	1203102 Airport Creek	1204202 Airport Creek
Deployed Month Year	?	21 Sep 2000	25 Jan 2001	21 Feb 2001	26 Mar 2001	26 Apr 2001	22 May 2001	26 Jun 2001
TPAH (ng/device)	2391.09	4039.99	9259.46	10378.31	6413.61	5415.19	1165.59	1481.60
TPAH (ng/g)	1082.14	1828.38	4190.56	4696.92	2902.61	2450.75	527.51	670.53
N0	232.54	7.22	9.07	0.00	28.69	11.14	11.63	0.00
N1	0.00	5.64	82.85	42.04	0.00	0.00	0.00	0.00
N2	33.26	156.18	501.73	382.85	46.18	42.77	19.55	24.59
N3	245.49	454.33	1355.98	1257.07	378.73	356.25	86.60	93.17
N4	208.74	329.83	831.72	802.25	429.34	257.25	79.29	44.11
BPH	0.00	0.00	7.88	4.58	0.00	0.00	0.00	0.00
ACY	0.00	0.00	8.70	0.00	0.00	0.00	0.00	0.00
ACE	0.00	0.00	11.24	21.47	0.00	0.00	0.00	0.00
F0	4.12	12.42	76.84	74.15	4.88	4.81	0.00	0.00
F1	47.26	86.88	280.91	237.05	50.53	46.53	16.54	18.81
F2	120.39	190.89	521.80	341.48	206.34	167.68	33.67	43.76
F3	102.44	111.13	440.36	401.85	139.60	115.25	49.72	13.52
D0	7.18	13.51	63.27	64.95	8.70	9.86	1.62	6.61
D1	38.77	91.22	199.29	217.35	149.48	138.62	12.38	29.76
D2	63.88	161.84	288.77	345.25	324.24	245.13	30.68	55.60
D3	44.61	131.16	212.14	252.27	250.78	211.46	38.22	49.53
P0	58.72	152.87	454.09	774.22	176.72	188.31	23.73	40.23
P1	245.72	500.60	1017.82	1151.17	748.08	678.04	79.09	134.86
P2	289.12	513.13	919.94	1066.85	850.49	696.92	123.54	180.55
P3	163.04	258.43	423.46	453.10	411.10	349.50	85.72	101.61
P4	40.38	33.59	79.59	109.33	91.75	55.41	17.04	36.00
ANT	2.88	2.89	7.39	11.22	3.18	3.35	0.00	1.70
FLA	61.66	150.36	226.34	624.16	549.30	471.14	57.10	54.87
PYR	107.60	251.19	372.96	583.37	587.68	520.47	103.22	115.03
C1F	65.03	145.73	228.54	256.86	253.16	218.87	49.25	68.71
BAA	2.95	8.22	29.76	34.12	19.83	13.53	1.65	5.21
C0	71.06	112.60	188.02	285.96	275.22	234.98	72.32	100.67
C1	37.38	72.54	173.88	205.73	150.38	134.30	48.86	68.57
C2	21.28	41.85	105.98	157.68	84.60	73.92	30.79	51.88
C3	0.00	5.26	17.50	34.96	16.86	12.91	5.94	9.23
C4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
BbF	11.96	6.90	23.51	45.04	33.30	25.60	18.37	25.25
BkF	0.00	3.65	10.52	24.24	21.19	15.79	0.00	0.00
BEP	15.51	12.25	44.71	62.44	49.81	48.37	17.63	33.51
BAP	0.00	5.44	13.40	16.49	15.25	10.51	8.41	0.00
PER	41.56	10.22	23.50	22.76	44.32	46.63	43.04	74.29
IDP	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DBZ	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
BzP	6.55	0.00	6.00	14.00	13.89	9.89	0.00	0.00

Table 2

SIN Sample Description	1204301 Airport Creek	1204702 Airport Creek	1208002 Airport Creek	1208102 Airport Creek	1208202 Airport Creek	1301302 Airport Creek	1301401 Airport Creek	1302702 Airport Creek
#Days								
Deployed	20 Jul 2001	23 Aug 2001	19 Sep 2001	21 Oct 2001	21 Feb 2002	20 Mar 2002	30 May 2002	33 Jun 2002
TPAH (ng/device)	3420.14	2789.38	1563.07	2149.51	6465.29	9724.96	2438.99	1824.54
TPAH (ng/g)	1547.86	1262.39	707.40	972.80	2931.23	4409.58	1153.03	879.76
N0	0.00	0.00	0.00	0.00	139.46	5.62	8.79	0.00
N1	0.00	0.00	0.00	0.00	0.00	37.05	0.00	0.00
N2	16.94	21.27	12.28	46.75	0.00	32.42	0.00	0.00
N3	195.19	220.85	99.49	168.89	23.03	88.83	0.00	0.00
N4	222.94	206.68	96.57	128.66	122.00	344.51	18.50	4.46
BPH	0.00	0.00	0.00	0.00	73.12	140.48	16.71	12.13
ACY	0.00	0.00	0.00	0.00	465.31	867.91	107.67	77.71
ACE	0.00	0.00	0.00	0.00	423.29	341.00	71.51	120.92
F0	0.00	0.00	0.00	8.99	0.00	14.54	0.00	0.00
F1	47.68	50.21	29.81	50.02	0.00	4.87	0.00	0.00
F2	168.22	129.98	64.16	88.86	4.57	8.64	0.00	0.00
F3	158.49	98.85	60.59	73.16	117.03	87.17	8.48	0.00
D0	4.43	6.39	4.14	9.04	432.81	261.60	35.33	19.86
D1	49.21	59.37	32.21	48.53	843.55	565.86	81.27	58.19
D2	120.78	117.90	64.80	85.76	395.60	307.57	120.90	41.80
D3	112.04	105.52	61.85	71.57	14.51	102.71	6.97	5.21
P0	36.11	43.69	36.94	100.67	76.23	369.26	48.96	51.13
P1	327.15	296.19	181.54	301.86	171.09	603.68	138.94	131.75
P2	479.26	387.42	222.47	309.83	173.50	467.64	149.92	135.64
P3	269.34	188.45	127.67	162.55	157.59	517.99	55.13	23.38
P4	64.67	43.29	33.08	24.73	148.00	292.72	52.68	35.45
ANT	0.00	0.00	0.00	0.00	650.09	1287.80	228.44	167.42
FLA	91.40	56.55	40.99	63.70	894.40	1354.04	372.90	257.31
PYR	190.05	120.13	80.02	111.97	541.47	696.62	270.54	155.94
C1F	127.51	86.75	56.22	55.26	122.50	124.50	81.02	36.20
BAA	7.51	4.30	5.25	0.00	4.92	11.19	2.26	0.00
C0	213.76	156.24	90.09	111.55	99.67	202.87	73.24	49.33
C1	193.82	107.01	56.83	55.91	112.47	289.74	128.39	105.45
C2	132.94	70.58	37.23	28.72	162.45	252.20	113.59	81.66
C3	23.77	13.59	6.75	0.00	10.71	15.48	7.56	3.24
C4	0.00	0.00	0.00	0.00	91.46	167.74	96.29	93.50
BbF	38.21	40.78	17.20	16.48	118.51	187.32	101.73	85.67
BkF	0.00	0.00	0.00	0.00	71.10	111.66	58.22	51.42
BEP	51.17	54.07	18.18	13.10	9.52	17.36	4.59	6.25
BAP	13.39	10.13	0.00	0.00	0.00	0.00	0.00	0.00
PER	55.97	86.57	26.71	12.93	10.98	21.12	12.63	14.44
IDP	0.00	0.00	0.00	0.00	3.86	7.07	5.73	5.24
DBZ	0.00	0.00	0.00	0.00	20.26	33.09	21.65	34.87
BzP	8.19	6.65	0.00	0.00	4.34	5.11	7.84	6.57

Table 2

SIN Sample Description	1302806 Airport Creek	1304102 Airport Creek	1304302 Airport Creek	1304402 Airport Creek	1304407 Airport Creek	1304602 Airport Creek	1400102 Airport Creek	1400202 Airport Creek
#Days Deployed Month Year TPAH (ng/device)	30 Jul 2002	29 Aug 2002	36 Sep 2002	32 Oct 2002	32 Oct 2002	33 Nov 2002	23 Feb 2003	23 Mar 2003
TPAH (ng/g)	3180.28	4301.62	6619.34	7579.19	282.03	13964.30	29182.95	5145.68
N0	0.00	0.00	0.00	23.63	78.52	29.14	22.58	44.29
N1	0.00	0.00	0.00	4.48	47.60	7.88	17.13	0.00
N2	0.00	0.00	0.00	38.23	33.70	64.02	162.17	25.59
N3	18.09	0.00	0.00	342.04	18.69	251.42	821.83	162.31
N4	91.74	13.71	21.70	392.74	16.51	363.57	973.67	184.71
BPH	43.45	12.14	31.68	0.38	3.22	0.94	2.60	0.00
ACY	385.59	92.72	269.57	0.00	0.00	0.00	3.65	0.00
ACE	348.03	109.65	324.15	1.93	11.60	22.77	78.94	5.05
F0	0.00	0.00	0.00	8.29	14.54	72.59	176.04	15.79
F1	0.00	0.00	3.12	67.24	7.57	100.19	217.14	32.34
F2	0.00	0.00	0.00	271.79	0.00	284.98	632.15	106.32
F3	5.20	8.25	6.27	260.51	0.00	366.76	775.86	136.27
D0	63.64	35.22	73.72	17.44	2.79	96.18	224.96	29.23
D1	127.44	72.12	203.03	145.15	1.61	241.32	559.59	80.95
D2	120.69	64.74	120.10	388.97	0.00	560.02	1326.30	212.71
D3	24.14	25.30	21.52	263.44	0.00	398.96	692.45	144.06
P0	107.66	78.21	121.43	266.99	25.64	1343.97	2677.24	387.21
P1	164.46	189.65	297.51	657.67	9.22	1177.77	2688.05	382.47
P2	139.79	192.73	289.71	889.99	0.00	1335.24	2980.97	497.64
P3	56.16	324.74	278.59	480.84	0.00	606.96	1474.21	281.84
P4	57.42	63.66	110.51	0.00	0.00	0.00	0.00	37.64
ANT	274.16	320.78	536.64	15.71	0.00	212.19	420.07	22.23
FLA	324.87	397.17	678.49	1006.48	4.88	2303.13	4615.90	816.18
PYR	210.52	274.47	443.15	906.48	5.95	1905.64	3759.46	800.82
C1F	66.19	80.38	88.20	280.75	0.00	506.45	1051.73	190.42
BAA	0.00	6.56	9.92	58.42	0.00	231.72	604.01	70.67
C0	54.31	631.82	874.01	326.65	0.00	684.01	1046.95	210.37
C1	124.46	493.57	707.47	177.54	0.00	309.48	517.57	97.98
C2	102.84	162.11	241.90	0.00	0.00	0.00	113.46	26.05
C3	6.31	32.15	53.99	0.00	0.00	0.00	0.00	0.00
C4	130.70	272.58	337.91	0.00	0.00	0.00	0.00	0.00
BbF	116.83	138.92	188.17	61.43	0.00	92.47	170.55	48.32
BkF	75.25	83.00	118.10	45.98	0.00	104.25	124.96	32.76
BEP	6.60	11.85	19.70	62.67	0.00	125.73	129.26	16.90
BAP	0.00	0.00	0.00	12.32	0.00	47.85	45.90	13.90
PER	16.28	72.95	117.37	84.14	0.00	51.65	26.17	28.91
IDP	7.85	44.75	50.74	8.68	0.00	33.34	26.56	0.00
DBZ	28.54	60.35	98.30	0.00	0.00	4.51	3.94	0.00
BzP	0.00	11.17	24.86	10.16	0.00	27.18	18.95	3.75

Table 2

SIN Sample Description	1400802 Airport Creek	1401402 Airport Creek	1401702 Airport Creek	1401905 Airport Creek	1402402 Airport Creek	1402502 Airport Creek	1402702 Airport Creek	1402802 Airport Creek
#Days Deployed	22	22	29	30	28	31	28	22
Month	Apr	May	Jun	Jul	Aug	Sep	Dec	Jan
Year	2003	2003	2003	2003	2003	2003	2003	2004
TPAH (ng/device)	475.60	1948.62	4082.21	2428.86	6096.82	2244.13	730.52	1070.56
TPAH (ng/g)	215.24	881.89	1847.49	1099.23	2759.24	1015.63	330.61	484.51
N0	79.20	78.38	41.29	9.70	0.00	0.00	0.00	0.00
N1	73.74	6.93	0.00	0.00	0.00	0.00	0.00	0.00
N2	73.43	27.70	11.60	1.83	18.78	0.00	56.88	109.02
N3	52.14	70.66	101.57	85.56	569.19	69.09	92.30	287.24
N4	17.87	76.86	106.57	87.93	588.50	94.22	67.19	123.95
BPH	17.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ACY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ACE	21.53	0.46	0.00	0.00	0.00	1.25	2.49	3.62
F0	49.93	0.00	0.00	0.64	6.02	0.66	3.86	9.39
F1	18.38	18.27	23.90	19.73	128.37	18.97	17.41	35.69
F2	0.00	49.96	86.24	68.04	335.54	55.30	29.21	60.84
F3	0.00	78.57	147.67	79.38	284.85	71.91	0.00	24.07
D0	6.93	4.48	16.13	7.64	41.00	11.78	8.79	9.79
D1	0.00	34.72	84.22	35.01	213.73	59.35	17.87	16.43
D2	0.00	85.30	188.42	94.49	348.38	136.28	32.69	23.24
D3	0.00	69.72	131.11	76.43	247.03	108.55	28.26	14.25
P0	54.16	53.99	175.11	41.07	171.95	51.87	30.45	53.90
P1	8.50	136.52	316.40	161.95	566.17	190.00	61.10	82.92
P2	0.00	220.45	407.85	262.24	644.32	287.60	54.49	62.03
P3	0.00	145.05	197.04	139.51	302.10	169.70	47.16	27.11
P4	0.00	10.67	40.37	45.78	105.15	41.90	4.00	2.53
ANT	0.00	0.00	4.83	0.00	5.05	2.98	0.00	0.00
FLA	1.32	201.83	557.25	236.18	366.96	218.76	41.50	35.86
PYR	1.44	224.01	416.60	268.62	366.48	219.88	59.30	42.00
C1F	0.00	71.72	115.52	89.26	135.37	73.80	19.22	12.07
BAA	0.00	5.39	11.15	19.89	1.50	8.85	0.00	0.00
C0	0.00	77.92	320.71	192.17	204.22	128.36	18.33	9.92
C1	0.00	62.85	185.25	101.77	125.83	70.38	15.95	8.64
C2	0.00	20.56	54.96	29.59	37.73	21.60	0.00	0.00
C3	0.00	0.00	2.47	0.00	0.00	0.00	0.00	0.00
C4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
BbF	0.00	16.07	79.39	50.45	110.28	28.27	0.00	0.00
BkF	0.00	10.67	42.51	20.13	18.23	8.07	0.00	0.00
BEP	0.00	17.39	58.96	41.67	42.11	20.76	4.13	2.57
BAP	0.00	4.31	17.26	12.44	7.71	0.00	0.00	0.00
PER	0.00	65.65	126.35	149.76	94.86	70.10	17.96	13.49
IDP	0.00	0.00	4.93	0.00	0.00	0.00	0.00	0.00
DBZ	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
BzP	0.00	1.57	8.56	0.00	9.40	3.86	0.00	0.00

Table 2

Table 2

Table 2

SIN Sample Description #Days	1603313 Airport Creek	1603315 Ariport Creek	1106517 Beaver Creek	1208306 Beaver Creek	1302811 Beaver Creek	1401919 Beaver Creek	1304409 Big Eddy (inlet)	1304410 Big Eddy (outlet)
Deployed	30	48	?	21	32	30	32	32
Month	Jun	Jul	Sep	Apr	Jul	Jul	Oct	Oct
Year	2005	2005	2000	2002	2002	2003	2002	2002
TPAH (ng/device)	2991.23	4397.91	320.58	163.47	527.41	271.50	23023.14	3776.34
TPAH (ng/g)	1358.42	1997.24	145.08	73.98	243.34	122.87	10419.60	1709.06
N0	0.00	0.00	230.35	0.00	0.00	0.00	44.07	57.55
N1	0.00	0.00	0.00	0.00	0.00	0.00	48.59	14.92
N2	0.00	0.00	0.00	0.00	0.00	0.00	272.54	129.60
N3	31.72	47.70	6.01	0.00	0.00	0.00	1434.67	272.06
N4	41.58	114.97	11.93	4.47	0.00	37.45	1851.47	230.79
BPH	0.00	0.00	0.00	0.00	0.00	0.00	6.08	0.22
ACY	0.00	0.00	0.00	2.37	6.42	0.00	0.00	0.00
ACE	0.00	0.00	0.00	17.07	69.59	0.00	7.28	0.00
F0	0.00	0.00	0.00	0.00	0.00	0.00	52.99	23.30
F1	0.00	19.39	0.00	0.00	0.00	1.73	357.17	94.38
F2	59.72	74.47	15.18	0.00	0.00	39.40	1323.50	219.71
F3	51.26	92.80	9.26	5.21	0.00	70.48	1662.50	369.11
D0	0.00	7.67	0.00	15.33	11.49	0.00	69.35	30.80
D1	36.98	71.53	0.00	29.28	86.67	0.98	561.24	107.15
D2	150.23	268.67	1.31	13.07	117.60	3.07	1393.55	190.63
D3	141.49	258.62	0.00	0.00	0.00	2.97	1209.49	135.71
P0	24.98	49.32	0.00	4.14	0.00	0.00	469.94	163.62
P1	137.18	227.40	7.44	8.94	5.76	3.50	2226.08	389.66
P2	309.84	513.60	14.53	8.66	6.92	48.90	3031.00	416.61
P3	229.08	422.47	8.34	7.75	0.00	20.91	1679.64	204.40
P4	34.58	63.67	0.00	3.59	1.51	0.00	0.00	41.97
ANT	0.00	0.00	0.00	11.65	10.86	0.00	58.71	3.86
FLA	325.91	349.30	4.75	13.59	77.55	2.23	843.90	142.34
PYR	208.66	279.84	7.38	8.00	45.35	26.45	1204.31	201.29
C1F	69.48	123.58	4.09	2.05	5.07	11.55	697.66	72.29
BAA	15.89	23.62	0.00	0.00	0.00	0.00	59.83	1.58
C0	236.80	365.11	0.00	4.99	4.02	1.89	709.81	106.89
C1	78.93	149.11	0.00	4.25	49.72	0.00	751.72	103.58
C2	61.55	105.71	0.00	2.65	22.75	0.00	560.57	0.00
C3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
C4	0.00	0.00	0.00	0.00	2.45	0.00	0.00	0.00
BbF	231.45	174.89	0.00	0.00	3.59	0.00	110.44	17.71
BkF	101.95	72.26	0.00	0.00	1.61	0.00	52.86	7.03
BEP	179.13	146.66	0.00	0.00	0.00	0.00	146.06	20.84
BAP	0.00	14.39	0.00	0.00	0.00	0.00	22.49	0.00
PER	207.12	338.32	0.00	0.00	0.00	0.00	7.76	0.00
IDP	0.00	0.00	0.00	0.00	0.00	0.00	33.33	0.00
DBZ	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
BzP	25.72	22.83	0.00	0.00	0.00	0.00	62.55	6.74

Table 2

SIN	1304609	1304610	1400121	1400123	1400213	1400216	1400829	1400831
Sample Description	Big Eddy (inlet)	Big Eddy (outlet)	Big Eddy (inlet)	Big Eddy (outlet)	Big Eddy (outlet)	Big Eddy (inlet)	Big Eddy (inlet)	Big Eddy (outlet)
#Days	34	34	22	22	27	27	22	22
Deployed Month Year	Nov 2002	Nov 2002	Feb 2003	Feb 2003	Mar 2003	Mar 2003	Apr 2003	Apr 2003
TPAH (ng/device)	26938.58	1085.79	30657.77	2839.04	3367.21	12467.49	7877.40	1964.83
TPAH (ng/g)	12191.61	491.40	13874.80	1284.87	1523.90	5642.42	3565.08	889.22
N0	68.75	62.91	48.93	29.59	1.16	70.54	4.90	0.00
N1	55.19	42.27	282.25	123.22	95.44	144.63	55.81	4.28
N2	313.62	68.76	1614.49	253.68	328.42	549.26	220.12	71.96
N3	1293.61	83.54	2859.13	279.26	352.31	895.28	353.64	129.46
N4	1396.88	54.17	1898.19	160.16	195.86	543.43	249.22	109.64
BPH	5.90	3.21	39.24	14.12	7.57	22.03	8.91	0.77
ACY	6.83	0.00	68.11	23.44	18.07	37.05	7.56	0.00
ACE	18.25	5.25	78.98	23.24	15.63	32.12	12.73	0.75
F0	96.69	16.88	362.26	68.88	69.09	144.85	69.23	12.78
F1	452.64	28.36	819.79	79.60	88.40	227.88	122.55	40.62
F2	1199.61	0.00	1353.29	154.78	153.26	601.02	496.08	97.96
F3	1640.53	0.00	1918.50	240.61	210.89	727.15	933.81	194.20
D0	165.07	14.46	425.68	60.68	85.66	187.61	92.92	24.26
D1	866.13	36.93	1070.24	95.38	156.95	427.49	256.25	89.72
D2	1994.72	57.06	1827.67	122.31	218.60	811.04	522.60	146.99
D3	1415.08	26.62	1001.51	52.79	78.78	498.86	286.68	74.27
P0	980.23	71.13	1830.29	212.93	282.28	861.61	507.02	110.68
P1	2690.69	119.68	3093.03	277.20	360.50	1283.33	845.96	231.21
P2	3408.30	124.93	3313.25	219.72	287.61	1350.38	906.73	235.50
P3	1549.68	55.70	1881.97	101.70	96.15	727.82	440.40	94.10
P4	405.64	14.30	295.17	0.00	0.00	154.15	30.36	0.00
ANT	136.22	0.00	191.58	8.39	4.93	27.88	13.84	0.00
FLA	992.22	49.12	972.29	63.77	97.23	465.12	328.49	91.20
PYR	1299.26	74.19	1097.53	102.65	103.13	533.88	364.62	87.67
C1F	798.04	21.52	638.11	26.96	28.36	265.02	166.85	29.58
BAA	131.33	0.00	72.46	0.00	0.00	12.54	3.58	0.00
C0	780.73	29.47	426.82	14.52	16.84	207.71	173.00	39.29
C1	995.40	25.32	572.66	20.93	14.07	299.24	199.25	31.01
C2	756.57	0.00	358.67	8.53	0.00	211.99	115.93	8.54
C3	182.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00
C4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
BbF	214.15	0.00	49.93	0.00	0.00	28.66	20.35	4.30
BkF	63.96	0.00	36.15	0.00	0.00	23.59	10.90	1.40
BEP	189.27	0.00	74.76	0.00	0.00	67.82	49.20	2.69
BAP	80.17	0.00	24.54	0.00	0.00	0.00	0.00	0.00
PER	36.95	0.00	13.22	0.00	0.00	0.00	0.00	0.00
IDP	81.20	0.00	11.56	0.00	0.00	0.00	0.00	0.00
DBZ	21.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00
BzP	155.22	0.00	35.52	0.00	0.00	26.48	7.88	0.00

Table 2

SIN	1401937	1401939	1503014	1503015	1504104	1504105	1504404	1504405
Sample Description	Big Eddy (inlet)	Big Eddy (outlet)						
#Days	30	30	27	27	28	28	29	29
Deployed Month	Jul	Jul	Jul	Jul	Oct	Oct	Nov	Nov
Year	2003	2003	2004	2004	2004	2004	2004	2004
TPAH (ng/device)	9272.63	928.21	31715.25	720.12	23621.87	7175.39	13183.99	45365.59
TPAH (ng/g)	4196.52	420.08	14402.93	327.03	10727.46	3258.58	5987.28	20601.99
N0	0.00	0.00	22.13	0.00	36.35	51.20	0.00	0.00
N1	0.00	0.00	112.77	0.00	0.00	0.00	44.29	35.41
N2	0.73	0.00	697.33	14.36	64.57	58.67	598.89	627.97
N3	247.81	28.12	1574.67	40.73	675.66	259.91	1107.82	3602.88
N4	639.46	43.67	1622.29	38.69	1590.94	508.85	827.06	4007.65
BPH	0.00	0.00	50.19	0.00	0.00	0.00	0.00	0.00
ACY	0.00	0.00	13.70	0.00	3.74	4.62	18.88	11.04
ACE	0.00	0.00	61.89	0.00	0.00	0.00	14.43	0.00
F0	3.31	1.39	369.83	0.00	0.00	16.86	109.77	29.04
F1	83.46	22.14	769.00	0.00	203.30	91.08	356.66	888.55
F2	506.07	55.59	1311.43	49.95	989.33	280.12	652.17	2467.22
F3	611.41	63.78	1211.99	51.60	1252.47	403.04	743.80	1977.74
D0	29.30	7.92	434.74	8.37	59.89	40.45	157.07	255.34
D1	259.23	46.70	1346.22	28.27	521.58	176.44	477.58	1569.53
D2	736.53	89.13	2257.76	49.89	1208.20	345.45	584.83	2293.86
D3	643.66	59.49	1464.72	33.14	1317.82	304.54	380.99	2120.04
P0	65.21	26.02	1890.44	48.82	416.42	288.23	834.69	1487.74
P1	566.99	81.83	2966.46	84.78	1588.99	487.99	1418.56	4518.29
P2	1237.75	114.82	3529.53	94.82	2734.77	706.44	1375.20	5732.50
P3	780.27	57.16	1915.56	42.40	1908.53	455.69	669.86	3176.39
P4	230.70	3.21	201.69	0.00	599.12	87.11	101.45	471.50
ANT	6.23	0.00	271.16	0.00	23.51	10.04	50.15	115.73
FLA	260.91	34.93	1390.75	33.08	2301.22	757.45	842.39	2559.88
PYR	561.03	57.91	1850.63	32.48	2765.02	849.10	852.95	2711.98
C1F	345.13	21.80	947.25	13.06	679.46	169.03	228.28	939.47
BAA	9.53	0.00	117.85	0.00	81.85	12.33	19.47	141.26
C0	413.53	50.80	1021.13	29.77	835.43	276.95	266.01	949.21
C1	484.82	33.19	1053.26	16.71	535.27	162.78	192.22	866.45
C2	176.50	12.43	686.82	9.19	351.80	50.99	44.35	653.23
C3	34.28	0.00	211.28	0.00	102.70	36.74	28.39	204.93
C4	0.00	0.00	0.00	0.00	12.70	0.00	0.00	10.90
BbF	117.83	9.61	91.01	0.00	185.73	80.00	70.68	298.63
BkF	28.95	0.00	58.87	0.00	175.85	65.25	39.17	139.13
BEP	114.74	6.59	152.66	0.00	247.34	97.26	75.95	294.54
BAP	28.94	0.00	0.00	0.00	40.91	0.00	0.00	62.08
PER	10.12	0.00	0.00	0.00	0.00	0.00	0.00	21.72
IDP	0.00	0.00	0.00	0.00	36.55	0.00	0.00	36.68
DBZ	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
BzP	38.20	0.00	38.23	0.00	74.87	40.80	0.00	87.08

Table 2

Table 2

SIN Sample Description #Days	1302822 Funny River	1400810 Funny River	1401914 Funny River	1400818 Hidden Creek	1208339 Hidden Creek	1302826 Hidden Creek	1401925 Hidden Creek	1401945 Isaak #10
Deployed Month	31 Jul	22 Apr	30 Jul	22 Apr	30 Mar	30 Jul	30 Jul	31 Jul
Year	2002	2003	2003	2003	2003	2002	2003	2003
TPAH (ng/device)	147.21	161.98	135.45	41.21	221.98	234.60	177.34	147.67
TPAH (ng/g)	135.51	73.31	61.30	18.65	100.46	106.17	80.26	66.83
N0	0.00	50.79	6.69	22.00	13.50	0.00	0.00	0.00
N1	0.00	0.48	0.00	0.00	0.00	0.00	0.00	0.00
N2	0.00	7.12	0.00	0.00	0.00	0.00	0.00	0.00
N3	0.00	18.11	0.00	0.00	1.44	0.00	7.65	0.00
N4	0.00	9.95	1.45	0.00	32.26	0.00	19.37	27.89
BPH	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ACY	6.39	0.00	0.00	0.00	0.00	13.73	2.68	0.00
ACE	9.93	0.00	0.00	0.00	0.00	38.08	0.00	0.00
F0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
F1	0.00	4.22	2.32	3.54	10.30	0.00	5.84	2.59
F2	0.00	7.88	0.00	0.00	83.39	0.00	46.01	26.05
F3	0.00	0.00	0.00	0.00	0.00	0.00	23.92	21.73
D0	15.65	0.00	0.00	0.00	0.00	11.13	0.00	0.00
D1	23.66	0.00	2.09	0.00	1.75	50.57	1.32	1.38
D2	4.75	0.00	5.52	0.00	0.00	15.79	3.18	1.84
D3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
P0	0.00	4.64	2.62	0.00	0.00	0.00	0.00	0.00
P1	4.15	9.30	8.82	0.00	0.00	0.00	10.86	8.53
P2	3.80	0.00	13.44	0.00	0.00	2.59	28.00	26.70
P3	0.00	0.00	2.59	0.00	0.00	0.00	6.23	8.06
P4	5.25	0.00	0.00	0.00	0.00	3.53	0.00	0.00
ANT	10.85	0.00	0.00	0.00	0.00	13.20	0.00	0.00
FLA	19.90	4.77	6.70	5.86	23.61	40.87	10.49	4.82
PYR	13.82	8.89	6.51	8.51	12.08	11.07	6.16	10.33
C1F	3.12	0.00	3.45	0.00	0.00	0.00	4.52	4.82
BAA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
C0	5.26	0.00	1.19	1.30	9.92	12.59	1.12	0.64
C1	4.05	0.00	0.00	0.00	6.32	10.22	0.00	2.31
C2	18.94	0.00	0.00	0.00	0.00	9.29	0.00	0.00
C3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
C4	2.95	0.00	0.00	0.00	0.00	2.20	0.00	0.00
BbF	0.00	0.00	0.00	0.00	2.75	0.00	0.00	0.00
BkF	0.00	0.00	0.00	0.00	2.13	0.00	0.00	0.00
BEP	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
BAP	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PER	0.00	35.83	72.06	0.00	22.53	0.00	0.00	0.00
IDP	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DBZ	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
BzP	0.00	0.00	0.00	0.00	0.00	3.27	0.00	0.00

Table 2

Table 2

SIN Sample	1200602	1200603	1203103	1400804 Kenai	1208303	1204703	1304104	1402410
Description	Kenai Dock	Kenai Dock	Kenai Dock		Dock	Kenai Dock	Kenai Dock	Kenai Dock
#Days								
Deployed Month Year	26 Apr 2001	26 Apr 2001	22 May 2001	21 Apr 2003	21 Apr 2002	23 Aug 2001	23 Aug 2002	31 Aug 2003
TPAH (ng/device)	240.81	215.22	6929.84	287.78	298.24	268.60	682.37	1133.40
TPAH (ng/g)	108.98	97.40	3136.24	130.24	134.98	121.56	312.49	512.94
N0	35.54	30.05	81.50	7.00	8.76	0.00	0.00	0.00
N1	0.00	0.00	50.81	0.00	0.00	0.00	0.00	0.00
N2	12.56	10.24	883.13	8.39	0.00	0.00	0.00	0.00
N3	45.85	46.58	3058.36	62.34	0.00	33.50	0.00	87.54
N4	18.25	21.75	1585.56	65.29	8.89	18.09	0.00	265.50
BPH	0.00	0.00	0.00	0.00	4.16	0.00	6.50	0.00
ACY	0.00	0.00	0.00	0.00	31.14	0.00	51.44	0.00
ACE	3.67	0.00	6.81	0.00	61.79	0.00	140.67	0.00
F0	0.00	0.00	51.67	0.00	0.00	0.00	0.00	0.00
F1	7.96	9.16	323.47	17.20	0.00	11.20	0.00	29.80
F2	12.65	8.40	317.03	29.42	0.00	60.62	0.00	160.72
F3	0.00	0.00	84.62	0.00	0.00	33.56	0.00	139.11
D0	1.89	2.13	25.77	2.92	21.40	0.00	24.33	0.00
D1	4.07	3.25	86.57	7.58	48.12	1.84	105.65	20.55
D2	5.04	3.96	46.24	7.05	19.35	3.33	42.99	40.30
D3	2.12	2.23	7.52	0.00	0.00	2.33	0.00	18.26
P0	19.07	13.01	44.68	1.72	2.67	0.00	6.99	4.34
P1	22.50	19.23	155.88	29.08	4.45	24.52	19.82	66.95
P2	14.69	13.98	73.29	31.39	4.08	30.48	12.61	152.36
P3	5.87	5.86	10.00	0.00	6.70	9.16	0.00	48.88
P4	0.00	0.00	0.00	0.00	4.67	0.00	12.63	3.08
ANT	0.00	0.00	2.12	0.00	16.20	0.00	46.72	0.00
FLA	12.94	12.07	4.74	9.29	25.44	12.97	96.29	28.35
PYR	10.87	10.55	7.24	9.11	15.20	16.52	36.86	44.01
C1F	3.41	2.78	2.14	0.00	2.59	6.65	5.68	21.70
BAA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
C0	1.85	0.00	3.97	0.00	9.19	3.84	25.51	1.95
C1	0.00	0.00	0.00	0.00	7.67	0.00	32.15	0.00
C2	0.00	0.00	0.00	0.00	4.60	0.00	18.12	0.00
C3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
C4	0.00	0.00	0.00	0.00	0.00	0.00	4.34	0.00
BbF	0.00	0.00	0.00	0.00	0.00	0.00	2.65	0.00
BkF	0.00	0.00	4.51	0.00	0.00	0.00	5.98	0.00
BEP	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
BAP	0.00	0.00	4.72	0.00	0.00	0.00	0.00	0.00
PER	0.00	0.00	7.51	0.00	0.00	0.00	0.00	0.00
IDP	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DBZ	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
BzP	0.00	0.00	0.00	0.00	0.00	0.00	3.56	0.00

Table 2

SIN	1400108	1204302	1302809	1401903	1204203	1302703	1401709	1301303
Sample				Kenai				
Description	Kenai Dock	Kenai Dock	Kenai Dock	Dock	Kenai Dock	Kenai Dock	Kenai Dock	Kenai Dock
#Days								
Deployed	24	20	35	31	26	33	28	20
Month	Feb	Jul	Jul	Jul	Jun	Jun	Jun	Mar
Year	2003	2001	2002	2003	2001	2002	2003	2002
TPAH (ng/device)	269.59	1214.35	4250.82	4827.25	2355.89	1654.13	548.46	176.97
TPAH (ng/g)	122.01	549.58	1929.58	2184.67	1066.21	752.13	248.22	80.09
N0	8.48	0.00	0.00	27.39	0.00	0.00	18.21	5.83
N1	0.09	0.00	13.12	0.00	0.00	0.00	0.00	0.00
N2	13.93	6.45	0.00	173.85	78.18	0.00	39.47	0.00
N3	42.31	106.85	23.75	834.48	372.14	29.15	67.69	0.00
N4	55.79	162.65	96.54	1055.67	407.14	136.85	75.07	11.21
BPH	0.00	0.00	98.75	0.00	0.00	52.59	0.00	5.55
ACY	0.00	0.00	707.12	9.45	4.02	412.56	0.00	34.48
ACE	0.00	0.00	890.00	0.00	0.00	285.78	0.00	25.50
F0	0.11	4.11	0.00	17.48	26.79	0.00	6.02	0.00
F1	6.69	41.93	0.00	147.19	116.13	2.75	27.75	0.00
F2	17.01	320.22	0.00	571.59	390.87	0.00	64.83	0.00
F3	0.00	181.97	14.36	369.36	157.99	20.87	36.31	0.00
D0	0.00	0.00	163.72	14.44	1.80	84.50	2.72	10.47
D1	3.27	5.80	729.76	130.53	21.53	159.60	4.46	16.19
D2	7.46	9.78	376.23	170.45	42.72	62.89	7.47	4.24
D3	0.00	5.46	4.71	55.03	21.21	9.14	7.91	0.00
P0	8.32	5.43	46.31	44.30	33.82	26.45	15.31	1.81
P1	17.10	84.58	60.82	371.37	195.92	28.58	48.57	4.56
P2	27.04	118.23	26.91	453.10	213.69	12.68	49.18	2.87
P3	10.75	28.99	21.29	107.74	60.74	42.14	13.57	0.00
P4	0.00	1.79	48.90	2.59	3.54	24.53	0.00	4.47
ANT	0.00	0.00	262.41	8.44	4.19	144.58	3.03	16.59
FLA	19.25	34.40	395.96	74.32	69.57	122.29	24.07	20.30
PYR	25.33	61.68	121.54	112.68	86.13	39.30	23.53	8.49
C1F	4.91	20.99	15.51	50.39	27.86	4.81	7.19	1.68
BAA	0.00	0.00	6.31	0.00	0.00	1.40	0.00	0.00
C0	1.75	7.24	83.31	3.29	7.35	20.48	1.07	6.20
C1	0.00	2.80	120.40	6.05	2.84	20.25	1.71	3.67
C2	0.00	3.00	64.54	0.00	3.22	9.90	0.00	2.88
C3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
C4	0.00	0.00	8.77	0.00	0.00	2.90	0.00	0.00
BbF	0.00	0.00	5.39	0.00	0.00	0.00	0.00	0.00
BkF	0.00	0.00	10.71	0.00	0.00	0.00	0.00	0.00
BEP	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
BAP	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PER	0.00	0.00	0.00	16.09	6.48	0.00	3.32	0.00
IDP	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DBZ	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
BzP	0.00	0.00	5.06	0.00	0.00	3.43	0.00	0.00

Table 2

Table 2

Table 2

Table 2

SIN Sample Description	1208309 Lower Slikok	1302813 Lower Slikok	1400806 Lower Slikok	1401913 Lower Slikok	1402416 Marlow	1401930 Marlow	1304411 Marydale (inlet)	1304412 Marydale (outlet)
#Days								
Deployed	21	32	22	30	28	30	32	32
Month	Apr	Jul	Apr	Jul	Aug	Jul	Oct	Oct
Year	2002	2002	2003	2003	2003	2003	2002	2002
TPAH (ng/device)	142.18	156.48	214.78	168.09	398.45	407.64	9871.47	452.82
TPAH (ng/g)	64.35	87.35	97.20	76.07	180.32	184.49	4467.54	204.93
N0	14.81	0.00	40.71	0.00	0.00	11.78	43.33	22.59
N1	0.00	0.00	0.00	0.00	0.00	0.00	110.74	15.79
N2	0.00	0.00	1.40	0.00	0.00	0.00	354.45	36.32
N3	0.00	0.00	18.21	0.00	0.00	20.72	531.91	36.28
N4	4.42	20.17	23.98	8.46	48.09	57.98	357.76	30.03
BPH	0.00	0.00	0.00	0.00	0.00	0.00	13.07	1.40
ACY	6.94	14.70	0.00	0.00	0.00	0.00	4.87	0.00
ACE	3.93	15.00	0.00	0.00	0.00	0.00	343.93	15.42
F0	0.00	0.00	0.00	0.00	0.00	0.00	497.48	24.34
F1	0.00	0.00	5.94	3.47	2.72	6.18	226.30	13.98
F2	0.00	0.00	5.29	0.00	45.09	65.23	281.60	0.00
F3	0.00	0.00	0.00	0.00	57.11	62.71	307.98	0.00
D0	13.06	6.30	0.00	0.00	0.00	0.00	225.45	11.42
D1	32.76	12.74	6.15	2.59	3.24	1.39	176.50	9.11
D2	9.31	0.00	7.42	5.34	6.41	6.13	240.20	13.25
D3	0.00	0.00	0.00	0.00	4.55	0.00	158.42	5.70
P0	0.00	2.00	0.30	4.57	0.00	1.05	1771.27	85.24
P1	0.00	3.65	18.96	13.19	19.68	26.45	711.55	26.63
P2	2.30	3.44	16.78	14.62	96.49	71.44	535.40	20.23
P3	10.02	4.45	8.02	6.29	44.62	18.47	244.36	0.00
P4	2.09	4.03	0.00	0.00	0.73	0.00	0.00	0.00
ANT	7.56	15.64	0.00	0.00	0.00	0.00	240.93	0.00
FLA	9.17	16.77	13.26	10.90	13.03	14.58	996.66	41.48
PYR	4.66	9.74	15.40	8.16	29.99	27.12	589.71	25.65
C1F	0.00	2.19	3.87	4.07	20.88	13.75	152.13	4.64
BAA	0.00	0.00	0.00	0.00	0.00	0.00	33.65	0.00
C0	13.92	10.91	3.47	2.48	2.93	2.69	360.65	13.31
C1	7.11	5.51	4.23	0.00	2.88	0.00	194.05	0.00
C2	2.20	3.91	0.00	0.00	0.00	0.00	0.00	0.00
C3	0.00	2.78	0.00	0.00	0.00	0.00	0.00	0.00
C4	0.00	3.20	0.00	0.00	0.00	0.00	0.00	0.00
BbF	0.00	0.00	0.00	0.00	0.00	0.00	42.32	0.00
BkF	0.00	3.36	0.00	0.00	0.00	0.00	41.78	0.00
BEP	0.00	0.00	0.00	0.00	0.00	0.00	61.46	0.00
BAP	0.00	0.00	0.00	0.00	0.00	0.00	8.31	0.00
PER	0.00	0.00	21.39	83.95	0.00	0.00	0.00	0.00
IDP	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DBZ	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
BzP	0.00	0.00	0.00	0.00	0.00	0.00	13.25	0.00

Table 2

SIN Sample Description #Days	1304611 Marydale (inlet)	1304612 Marydale (outlet)	1400113 Marydale (inlet)	1400115 Marydale (outlet)	1400217 Marydale (inlet)	1400225 Marydale (outlet)	1400825 Marydale (inlet)	1400827 Marydale (outlet)
Deployed	34	34	22	22	27	47	22	22
Month	Nov	Nov	Feb	Feb	Mar	Mar	Apr	Apr
Year	2002	2002	2003	2003	2003	2003	2003	2003
TPAH								
(ng/device)	52039.91	20920.56	51492.67	27306.51	13627.21	11200.98	11146.04	13759.98
TPAH (ng/g)	23551.73	9468.03	23304.07	12358.12	6167.27	5069.23	5044.37	6227.36
N0	12.51	69.44	42.72	16.08	42.75	43.66	60.58	5.96
N1	104.68	120.37	164.11	116.56	78.05	49.35	34.17	5.81
N2	464.03	218.27	1735.66	1050.77	446.07	283.08	164.89	103.89
N3	1262.25	360.58	6228.20	2577.57	763.11	559.75	357.83	336.89
N4	1262.96	336.69	3929.16	1582.57	550.83	429.31	350.55	517.15
BPH	24.81	28.39	26.81	25.76	7.66	10.87	5.94	2.08
ACY	13.36	13.19	15.80	15.40	4.12	5.52	0.00	0.00
ACE	408.18	275.92	305.31	303.70	38.09	104.35	55.10	32.00
F0	903.57	502.68	629.91	669.42	111.08	194.86	126.68	67.30
F1	555.16	174.74	1001.44	568.25	155.54	123.14	104.71	70.22
F2	1049.75	394.77	2198.82	904.00	402.79	323.06	302.30	254.07
F3	1723.04	626.92	2480.42	1182.44	724.73	701.07	788.53	691.43
D0	937.87	396.77	652.62	507.87	200.09	215.72	179.25	129.15
D1	1235.95	403.58	1716.29	713.25	370.85	287.93	300.32	362.68
D2	2087.78	706.87	2780.20	997.43	731.17	489.14	565.29	975.09
D3	1486.91	479.42	1537.37	564.88	400.59	233.72	322.81	625.74
P0	8198.50	3117.02	5366.00	3450.90	1632.62	1716.42	1323.21	889.45
P1	4462.94	1501.04	1820.29	2531.28	1185.21	934.37	940.22	951.38
P2	4485.31	1579.81	4501.27	2243.46	1324.79	920.07	1073.63	1600.05
P3	1742.27	730.28	1573.01	1321.66	639.11	409.93	523.98	1053.52
P4	388.33	200.43	389.67	203.84	43.65	26.07	35.14	69.73
ANT	1254.85	409.86	778.99	366.65	58.88	83.24	109.65	43.36
FLA	5719.57	2152.88	3997.54	1671.38	1358.02	1219.44	1254.85	1379.81
PYR	4077.02	1591.09	2958.05	1222.34	918.43	877.37	818.79	1240.59
C1F	1338.34	492.57	1136.21	419.17	284.89	189.15	277.50	428.13
BAA	892.42	363.15	396.44	191.28	55.41	40.12	55.57	70.10
C0	2225.33	991.62	1251.07	570.77	386.79	246.92	402.43	613.99
C1	1157.39	632.21	851.79	547.12	259.04	165.62	256.40	511.06
C2	645.57	516.41	0.00	335.15	99.50	62.52	89.68	185.54
C3	103.83	112.90	25.29	0.00	0.00	0.00	0.00	0.00
C4	0.00	0.00	3.57	0.00	0.00	0.00	0.00	0.00
BbF	573.47	380.14	462.44	78.64	101.57	56.49	76.00	143.22
BkF	247.67	168.20	210.97	74.13	86.58	66.30	79.16	141.86
BEP	346.52	240.04	168.91	109.84	98.44	68.20	83.94	161.91
BAP	301.89	211.93	64.45	48.21	23.60	22.11	11.60	30.31
PER	90.28	61.66	21.51	16.93	3.97	5.11	4.31	27.90
IDP	125.10	181.85	36.80	55.32	16.49	15.62	0.00	14.83
DBZ	21.95	29.49	0.00	7.18	0.00	0.00	0.00	0.00
BzP	108.56	147.39	33.55	45.31	22.70	21.41	11.05	23.77

Table 2

SIN Sample Description	1401941 Marydale (inlet)	1401943 Marydale (outlet)	1503016 Marydale (inlet)	1503017 Marydale (outlet)	1504106 Marydale (inlet)	1504107 Marydale (outlet)	1504406 Marydale (inlet)	1504407 Marydale (outlet)
#Days								
Deployed	30	30	27 days	27 days	28	28	29	29
Month	Jul	Jul	Jul	Jul	Oct	Oct	Nov	Nov
Year	2003	2003	2004	2004	2004	2004	2004	2004
TPAH (ng/device)	11990.67	5560.62	1116883	105778.39	36695.54	14337.59	43846.16	70081.68
TPAH (ng/g)	5426.63	2516.57	507213	48037.42	16664.64	6511.17	19911.97	31826.37
N0	0.00	0.00	185.53	0.00	40.55	49.93	0.00	0.00
N1	0.00	0.00	7579.00	166.84	50.87	0.00	29.32	99.89
N2	135.90	0.00	87761.32	4671.31	446.21	29.21	636.61	1133.36
N3	376.81	73.72	226704.5	19295.77	2155.52	571.73	2155.57	3922.49
N4	424.67	149.73	246359.0	26539.24	2140.88	1167.28	2164.04	4310.95
BPH	0.05	0.00	149.80	0.00	0.00	0.00	0.00	0.00
ACY	6.00	0.00	0.00	0.00	21.22	0.00	6.98	25.94
ACE	67.28	8.31	419.95	28.51	44.02	0.00	17.28	55.03
F0	137.81	15.68	6489.39	387.50	186.21	0.00	122.94	37.56
F1	137.39	25.89	40663.12	3996.36	652.60	135.76	654.97	1023.76
F2	402.19	107.75	80893.33	9392.84	1364.28	595.64	1607.24	2944.18
F3	516.89	209.40	27370.02	4451.77	1087.84	513.72	1496.61	2462.31
D0	176.58	43.28	11422.73	814.33	331.32	32.41	381.25	692.11
D1	292.79	122.83	46263.61	3712.62	1053.56	428.34	1948.86	3676.96
D2	493.47	343.23	56310.62	3829.10	1328.12	690.21	2357.06	4839.41
D3	319.60	303.49	14922.00	1264.05	1065.35	468.99	2110.15	2103.84
P0	1316.13	194.89	30192.09	1988.08	3119.32	341.91	2114.25	4161.00
P1	898.05	244.40	109491.1	8742.84	3450.88	1332.48	5518.91	10956.00
P2	951.93	466.77	85604.99	7596.21	3528.55	1696.60	6800.88	10454.88
P3	445.93	376.92	21678.13	1979.80	1757.43	812.50	4016.99	4230.88
P4	92.46	96.92	3301.56	172.88	289.38	141.78	678.20	416.88
ANT	116.78	6.60	1283.13	94.19	182.55	12.63	118.90	230.71
FLA	1655.18	691.24	3373.11	1628.07	5070.54	2057.90	1923.27	4084.74
PYR	1044.49	590.58	2493.22	1352.39	3308.02	1495.56	1886.08	3635.83
C1F	294.66	184.47	2792.81	488.75	817.39	288.69	918.54	1136.41
BAA	161.57	51.15	164.23	69.16	181.54	34.50	97.72	141.97
C0	679.31	476.90	1729.26	1500.91	1250.54	624.31	1020.36	1388.16
C1	251.50	279.16	625.10	679.83	500.91	246.66	1052.64	860.29
C2	66.56	82.83	152.53	169.76	89.42	142.03	740.72	399.52
C3	0.00	6.43	52.00	106.32	60.18	34.70	256.73	92.26
C4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
BbF	189.38	125.06	176.74	221.90	442.32	118.41	303.90	201.03
BkF	106.25	80.24	109.45	134.02	223.41	94.83	104.90	74.15
BEP	118.75	114.18	107.72	219.22	263.14	123.30	338.12	192.07
BAP	35.40	10.13	29.88	15.61	73.74	18.85	60.08	36.45
PER	9.22	30.85	0.00	33.68	0.00	0.00	60.40	27.58
IDP	39.18	22.53	0.00	0.00	50.00	0.00	47.76	0.00
DBZ	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
BzP	30.50	25.08	31.58	34.55	67.74	36.73	97.90	33.09

Table 2

SIN Sample Description #Days	1504508 Marydale (inlet)	1504509 Marydale (outlet)	1600107 Marydale (inlet)	1600108 Marydale (outlet)	1208323 Moose River	1302832 Moose River	1400816 Moose River	1401922 Moose River
Deployed	29	29	29	29	21	31	22	30
Month	Feb	Feb	Mar	Mar	Apr	Jul	Apr	Jul
Year	2005	2005	2005	2005	2002	2002	2003	2003
TPAH (ng/device)	13350.06	14179.33	40962.02	37755.44	44.66	594.87	91.75	243.39
TPAH (ng/g)	6062.70	6439.30	18602.19	17145.98	23.56	269.22	41.52	110.15
N0	0.00	0.00	20.48	0.00	5.05	0.00	4.24	1.04
N1	115.61	101.79	67.41	81.84	0.00	0.00	0.00	0.00
N2	490.68	521.55	866.99	1531.85	0.00	0.00	7.65	0.00
N3	843.13	1136.52	2734.43	3586.23	0.00	0.00	18.18	21.26
N4	542.70	989.59	1780.64	1729.10	0.00	0.00	0.00	34.72
BPH	16.71	0.00	0.00	0.00	0.00	3.23	0.00	0.00
ACY	13.19	9.20	7.20	8.88	5.97	44.35	0.00	0.00
ACE	0.00	20.99	68.17	84.30	6.68	87.74	0.00	0.00
F0	85.49	95.24	199.53	247.44	0.00	0.00	0.00	0.00
F1	231.28	300.00	439.30	601.93	0.00	0.00	7.71	11.98
F2	602.62	607.15	1147.95	956.60	0.00	0.00	0.00	45.89
F3	789.51	562.61	1134.78	1071.33	0.00	0.00	0.00	27.47
D0	344.11	297.71	407.05	480.01	6.88	25.58	0.00	0.00
D1	800.18	791.43	1714.15	1582.85	3.89	101.86	0.00	1.63
D2	717.43	710.32	2185.82	1707.55	0.00	32.19	0.00	3.13
D3	417.25	438.76	1522.29	1052.79	0.00	0.00	0.00	0.00
P0	1002.51	1005.01	3405.86	3885.00	0.00	3.30	0.00	0.61
P1	2161.10	1951.95	5241.22	4977.09	0.00	11.37	0.00	25.35
P2	1925.31	1828.44	5756.64	4464.09	0.00	8.61	0.00	33.62
P3	796.28	802.30	2700.00	1831.57	0.00	0.00	0.00	7.43
P4	83.84	87.49	282.29	13.55	1.64	11.95	0.00	0.00
ANT	15.71	35.74	103.94	106.58	5.60	47.96	0.00	0.00
FLA	220.01	539.79	2820.49	2666.26	4.86	101.16	4.40	11.96
PYR	304.70	563.84	2145.08	1980.55	2.20	31.60	11.16	11.63
C1F	178.32	212.24	699.30	530.58	0.00	3.76	0.00	5.66
BAA	4.10	12.40	58.05	96.76	0.00	0.00	0.00	0.00
C0	209.11	265.85	1233.48	951.56	0.00	24.15	0.00	0.00
C1	218.84	167.41	817.55	559.39	1.56	35.85	0.00	0.00
C2	119.89	27.58	461.88	98.12	1.98	24.13	0.00	0.00
C3	30.54	11.75	113.15	75.05	0.00	0.00	0.00	0.00
C4	0.00	0.00	0.00	0.00	0.00	4.84	0.00	0.00
BbF	24.19	30.67	359.14	339.90	0.00	4.44	0.00	0.00
BkF	0.00	16.39	94.38	105.17	0.00	1.99	0.00	0.00
BEP	45.70	37.62	237.97	203.32	0.00	0.00	0.00	0.00
BAP	0.00	0.00	17.62	34.36	0.00	0.00	0.00	0.00
PER	0.00	0.00	22.36	0.00	0.00	0.00	38.41	0.00
IDP	0.00	0.00	37.97	52.19	0.00	0.00	0.00	0.00
DBZ	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
BzP	0.00	0.00	57.45	61.63	0.00	0.00	0.00	0.00

Table 2

SIN Sample Description #Days	1208315 Morgan's Landing	1208307 Pillars	1302820 Pillars	1400812 Pillars	1401917 Pillars	1503005 Upstream Pillars	1600909 Upstream Pillars	1603306 Upstream Pillars
Deployed Month Year	21 Apr 2002	21 Apr 2002	30 Jul 2002	23 Apr 2003	30 Jul 2003	27 Jul 2004	28 Apr 2005	26 Jul 2005
TPAH (ng/device)	136.37	163.04	1254.78	85.95	960.98	697.53	77.39	936.15
TPAH (ng/g)	61.72	73.79	570.65	38.90	434.91	316.77	35.15	425.13
N0	6.99	8.97	0.00	0.00	3.96	0.00	0.00	0.00
N1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
N2	0.00	0.00	0.00	1.58	0.00	0.00	0.00	0.00
N3	0.00	0.00	0.00	24.05	19.48	13.24	20.76	9.71
N4	11.28	4.83	0.00	28.03	102.12	77.20	7.93	86.99
BPH	4.89	1.65	1.68	0.00	0.00	0.00	0.00	0.00
ACY	20.21	10.83	28.74	0.00	0.00	0.00	0.00	0.00
ACE	5.59	15.05	119.45	0.00	0.00	0.00	0.00	0.00
F0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
F1	0.00	0.00	0.00	0.00	15.56	0.00	0.00	0.00
F2	0.00	0.00	0.00	0.00	152.91	92.14	0.00	48.25
F3	11.21	16.96	0.00	0.00	187.71	93.56	0.00	118.80
D0	18.50	22.35	25.00	0.00	0.00	0.00	0.00	0.00
D1	20.88	26.00	202.97	0.00	2.85	0.00	0.00	5.50
D2	0.00	11.08	270.22	0.00	6.30	10.54	0.00	5.76
D3	0.00	0.00	0.00	0.00	6.41	9.83	0.00	6.33
P0	0.00	0.00	1.62	0.84	2.60	0.00	0.00	0.00
P1	0.00	1.53	9.64	5.90	42.27	18.22	20.72	14.90
P2	1.84	4.26	13.58	0.00	176.22	148.26	15.29	273.30
P3	8.34	7.02	0.00	0.00	67.40	81.52	0.00	209.27
P4	1.32	1.94	7.77	0.00	5.25	5.44	5.38	0.00
ANT	8.29	7.26	35.88	0.00	0.00	0.00	0.00	0.00
FLA	8.78	8.26	190.74	9.58	18.79	10.75	0.00	20.06
PYR	4.55	6.62	115.68	6.80	74.88	69.40	7.32	54.18
C1F	0.00	2.36	14.84	0.00	45.91	44.75	0.00	63.64
BAA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
C0	5.16	3.81	15.17	2.62	5.85	9.85	0.00	19.45
C1	2.94	2.86	97.19	0.00	5.39	12.82	0.00	0.00
C2	1.81	2.99	63.98	0.00	0.00	0.00	0.00	0.00
C3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
C4	0.00	0.00	12.59	0.00	0.00	0.00	0.00	0.00
BbF	0.00	0.00	8.57	0.00	6.70	0.00	0.00	0.00
BkF	0.00	0.00	5.38	0.00	0.00	0.00	0.00	0.00
BEP	0.00	0.00	0.00	0.00	3.16	0.00	0.00	0.00
BAP	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PER	0.00	0.00	15.86	6.53	5.29	0.00	0.00	0.00
IDP	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DBZ	0.00	0.00	7.70	0.00	0.00	0.00	0.00	0.00
BzP	0.00	0.00	0.00	0.00	3.95	0.00	0.00	0.00

Table 2

Table 2

Table 2

Table 2

Table 2

Table 2

SIN Sample Description #Days	1401710 Soldotna Creek	1401915 Soldotna Creek	1402409 Soldotna Creek	1402509 Soldotna Creek	1106515 Soldotna Creek	1304415 Sterling (outlet)	1400117 Sterling (inlet)	1400119 Sterling (outlet)
Deployed	28	30	29	31	?	21	22	22
Month	Jun	Jul	Aug	Sep	Sep	Mar	Feb	Feb
Year	2003	2003	2003	2003	2000	2003	2003	2003
TPAH (ng/device)	319.25	166.02	296.29	264.62	390.09	4921.65	68310.78	64774.50
TPAH (ng/g)	144.48	75.14	134.09	119.76	176.55	2227.39	30915.45	29315.04
N0	115.48	0.00	0.00	16.84	299.54	100.43	9.15	29.29
N1	0.00	0.00	0.00	0.00	0.00	34.71	185.99	490.71
N2	13.06	0.00	0.00	16.80	0.00	192.58	4206.22	7185.57
N3	3.20	0.00	0.14	29.50	8.39	415.96	13424.16	13668.96
N4	12.97	10.83	30.94	34.01	6.03	302.24	9570.08	6983.18
BPH	0.00	0.00	0.00	0.00	0.00	1.74	19.65	53.29
ACY	0.00	0.00	0.00	0.00	0.00	5.55	41.74	73.17
ACE	0.00	0.00	0.00	0.00	0.00	1.41	80.19	119.22
F0	0.00	0.00	0.00	0.00	0.00	29.18	430.53	699.96
F1	3.82	3.84	8.52	7.52	4.06	77.06	1944.90	2140.65
F2	6.61	11.99	15.54	0.00	8.28	224.02	3558.30	2685.63
F3	0.00	0.00	17.62	0.00	0.00	325.74	3633.57	2490.53
D0	0.00	0.00	0.00	0.00	0.00	38.00	373.84	642.55
D1	6.82	3.68	9.77	6.99	1.62	108.51	1529.98	1580.06
D2	10.78	9.71	21.45	13.10	1.95	245.97	2778.44	2384.09
D3	6.95	7.47	14.38	7.33	0.00	205.35	1524.13	1335.43
P0	7.78	5.92	6.75	10.72	0.00	239.96	2046.93	2961.49
P1	20.74	17.80	33.38	25.09	10.89	340.03	4814.75	4507.49
P2	21.77	18.21	39.14	26.74	9.40	451.95	5406.70	4275.71
P3	11.14	12.08	21.52	11.20	2.88	282.12	2846.18	2414.45
P4	0.98	1.29	1.47	0.81	0.00	25.95	451.04	376.95
ANT	0.00	0.00	0.00	0.00	0.00	5.76	301.30	347.25
FLA	10.00	10.84	11.91	11.79	9.00	305.31	2197.12	1958.34
PYR	10.35	11.10	16.53	12.97	5.85	315.39	2190.35	1876.79
C1F	4.13	4.73	7.24	4.83	2.55	124.85	1108.81	892.59
BAA	0.00	0.00	0.00	0.00	0.00	10.89	372.35	176.82
C0	3.63	4.25	7.25	2.70	0.00	141.27	942.12	648.71
C1	8.19	0.00	8.40	5.25	0.00	152.34	1009.81	716.79
C2	2.00	0.00	0.00	2.33	3.09	64.58	612.57	431.40
C3	0.00	0.00	0.00	0.00	0.00	0.00	78.62	53.27
C4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
BbF	0.00	0.00	0.00	0.00	0.00	45.08	102.36	156.37
BkF	0.00	0.00	0.00	0.00	0.00	24.22	77.97	112.10
BEP	0.00	0.00	0.00	0.00	0.00	46.43	164.07	145.81
BAP	0.00	0.00	0.00	0.00	0.00	0.00	89.02	65.37
PER	38.87	32.27	24.35	18.11	16.56	25.94	25.94	21.41
IDP	0.00	0.00	0.00	0.00	0.00	0.00	62.82	25.23
DBZ	0.00	0.00	0.00	0.00	0.00	0.00	9.02	0.00
BzP	0.00	0.00	0.00	0.00	0.00	11.11	90.07	47.90

Table 2

SIN	1400222	1400223	1400227	1400821	1400823	1401933	1401935	1503012
Sample Description	Sterling (inlet)	Sterling (outlet)	Sterling (inlet)	Sterling (inlet)	Sterling (outlet)	Sterling (inlet)	Sterling (outlet)	Sterling (inlet)
#Days								
Deployed Month	27 Mar	26 Mar	21 Mar	22 Apr	22 Apr	30 Jul	30 Jul	27 Jul
Year	2003	2003	2003	2003	2003	2003	2003	2004
TPAH (ng/device)	17011.27	10820.12	11263.79	7794.35	5631.13	9574.43	3975.74	18742.27
TPAH (ng/g)	7698.80	4896.87	5097.66	3527.49	2548.49	4333	1799	8511.48
N0	586.55	54.25	81.48	0.00	0.00	8.46	2.95	0.00
N1	687.67	50.81	74.00	3.75	0.08	0.00	0.00	17.98
N2	1425.25	370.23	486.33	91.44	57.26	11.76	0.00	269.22
N3	1917.79	987.46	962.25	314.95	237.72	296.58	86.54	992.39
N4	1140.49	843.41	678.23	352.07	273.81	752.11	279.52	1478.21
BPH	93.05	4.87	5.14	0.96	0.41	0.00	0.00	0.00
ACY	29.47	0.00	11.52	0.00	0.00	0.00	0.00	0.00
ACE	32.11	1.91	19.72	0.00	0.00	2.66	0.00	0.00
F0	199.08	40.73	92.39	13.87	5.47	15.77	2.89	43.79
F1	449.78	178.95	225.41	73.75	42.97	79.27	27.72	263.52
F2	840.15	393.82	650.57	317.67	164.39	567.80	177.03	952.29
F3	935.49	568.51	1003.69	760.35	354.31	631.22	244.32	918.31
D0	149.71	57.35	100.89	32.64	17.83	43.10	10.79	128.73
D1	334.33	250.46	281.80	206.34	128.75	240.76	61.48	583.81
D2	612.49	614.42	519.55	582.68	354.56	702.28	254.76	1149.00
D3	434.46	402.01	357.71	450.18	371.31	535.53	246.55	924.20
P0	834.69	367.64	640.25	213.57	109.34	136.47	38.99	651.56
P1	1146.95	753.61	895.99	592.83	352.94	655.94	168.36	1653.93
P2	1268.34	1124.82	1052.38	944.98	612.02	1299.37	471.44	2142.32
P3	760.84	623.91	537.66	599.57	465.90	728.27	316.36	1250.36
P4	148.24	128.85	41.42	0.00	46.80	166.18	104.33	143.78
ANT	59.91	23.61	29.69	8.18	0.00	14.93	3.47	26.69
FLA	718.68	800.68	707.83	504.97	363.39	380.29	136.41	1102.54
PYR	708.06	820.97	666.33	555.39	447.52	592.01	348.21	1295.34
C1F	316.24	292.00	254.31	256.47	224.40	317.80	150.25	412.03
BAA	48.82	44.35	26.33	12.34	10.54	3.96	1.98	38.34
C0	254.06	264.21	226.12	269.92	268.16	437.77	253.81	913.59
C1	313.34	280.43	225.20	296.53	282.11	411.65	209.34	655.16
C2	199.80	151.21	108.25	158.49	153.53	135.48	81.78	290.37
C3	19.29	12.69	14.70	0.00	0.00	0.00	0.00	149.74
C4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
BbF	79.62	71.93	83.26	48.93	59.75	140.89	98.00	82.67
BkF	70.18	74.15	49.43	43.73	59.73	46.26	27.92	58.86
BEP	99.68	92.94	78.97	73.97	89.66	125.88	86.09	118.47
BAP	28.06	22.75	15.16	0.00	0.00	38.12	20.51	0.00
PER	8.67	15.84	12.17	0.00	59.89	12.05	33.95	0.00
IDP	19.62	12.65	15.53	0.00	0.00	0.00	0.00	0.00
DBZ	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
BzP	40.30	21.70	32.10	13.83	16.57	43.81	30.01	35.05

Table 2

SIN Sample Description #Days	1503013 Sterling (outlet)	1504102 Sterling (inlet)	1504103 Sterling (outlet)	1504402 Sterling (inlet)	1504403 Sterling (outlet)	1504506 Sterling (inlet)	1504507 Sterling (outlet)	1600102 Sterling (inlet)
Deployed	27	28	28	29	29	29	29	29
Month	Jul	Oct	Oct	Nov	Nov	Feb	Feb	Mar
Year	2004	2004	2004	2004	2004	2005	2005	2005
TPAH								
(ng/device)	6943.83	35584.39	52570.90	37962.02	28369.20	25017.49	8345.49	42890.19
TPAH (ng/g)	3153.42	16160.03	23874.16	17239.79	12883.38	11361.26	3789.96	19477.83
N0	0.00	0.00	0.00	0.00	0.00	33.60	33.34	0.00
N1	0.00	0.00	0.00	0.00	0.00	477.81	254.09	0.00
N2	128.80	60.56	101.22	41.50	167.38	1900.52	797.90	568.48
N3	375.86	1043.75	1321.37	916.13	1645.35	2373.80	953.48	4313.02
N4	494.38	5032.55	3713.50	2748.55	2416.67	1457.19	594.97	3600.30
BPH	0.00	0.00	0.00	0.00	0.00	46.08	26.59	0.00
ACY	0.00	4.34	4.15	0.00	0.00	20.58	15.76	0.00
ACE	0.00	0.00	0.00	0.00	0.00	17.10	0.00	0.00
F0	26.28	22.81	39.80	0.00	19.37	197.51	91.84	33.54
F1	103.56	296.56	425.68	249.24	418.94	508.14	195.04	541.21
F2	332.59	1906.29	2312.03	1774.16	1495.28	1094.84	410.84	1760.23
F3	313.31	1543.40	1976.75	1501.54	1046.12	1251.71	378.02	1836.01
D0	62.70	88.71	125.46	27.80	65.52	308.38	127.48	128.16
D1	213.32	604.09	916.94	786.59	918.78	1176.02	360.28	1538.61
D2	400.57	1736.04	2675.41	2614.32	1523.41	1506.26	402.51	2470.22
D3	315.70	1301.80	2359.73	2663.04	1180.06	1322.04	277.39	1977.40
P0	270.60	553.05	1111.27	147.13	474.23	1014.79	425.94	955.12
P1	569.87	1454.35	3013.29	2249.23	2799.01	2436.54	766.97	4182.91
P2	698.05	3119.60	5506.40	6201.08	3752.89	2846.20	793.01	5481.62
P3	409.57	2029.79	3373.79	3600.34	1958.61	1650.59	407.71	2723.26
P4	61.62	20.73	761.69	470.73	305.72	18.59	4.37	372.28
ANT	9.21	36.63	66.10	19.68	41.78	39.91	15.41	54.76
FLA	395.18	3996.43	6275.49	2129.67	2398.58	488.68	197.24	2984.61
PYR	506.81	5602.98	7511.44	3663.62	2806.37	947.92	342.59	3148.02
C1F	152.65	833.05	1505.82	1359.94	721.03	467.43	136.82	901.02
BAA	14.03	310.26	574.76	153.15	92.70	12.95	2.52	126.76
C0	436.73	1644.41	2315.07	1259.88	725.83	367.10	117.79	908.47
C1	269.57	522.02	976.10	1143.25	513.35	489.72	115.62	723.19
C2	124.89	200.29	461.06	860.69	311.15	95.72	18.38	549.35
C3	70.27	76.18	199.34	240.31	76.96	151.44	23.66	168.78
C4	0.00	0.00	10.86	29.71	0.00	8.06	0.00	0.00
BbF	53.18	495.72	1274.50	333.88	142.34	60.74	22.03	231.55
BkF	31.28	334.43	404.06	177.26	91.96	27.28	0.00	124.95
BEP	65.98	390.13	575.24	373.36	189.37	130.24	35.90	255.58
BAP	0.00	97.92	201.52	55.15	32.52	28.41	0.00	63.82
PER	37.26	26.72	49.21	26.08	0.00	0.00	0.00	0.00
IDP	0.00	99.46	198.77	44.82	0.00	0.00	0.00	59.58
DBZ	0.00	0.00	37.78	0.00	0.00	0.00	0.00	0.00
BzP	0.00	99.33	195.29	100.20	37.91	43.64	0.00	107.41

Table 2

Table 3

Organochlorine concentrations in low-density polyethylene strips and in Chinook salmon egg and muscle tissues from the Kenai River, 2002. Note: PEMD SIN = Sample Identification Number for passive water sample; Tissue SIN = Sample Identification Number for tissue sample; Sample Description = Location where the sample was obtained; Total PCB = sum of the concentration of 39 congeners; "Less than" (<) symbol indicates that the analyte was not detected above the concentration stated. Concentrations are reported as ng/g of device for passive samplers and as ng/g of tissue for tissue egg and muscle samples.

Table 3

PEMD SIN	105683	106684	106685	105686	105687	105688	105689
Sample	Airport Creek	Kenai Dock	Pillars	Moose River	Bing's Landing	44.5 Mile	Hidden Creek
Description	21	21	21	21	21	21	21
#Days Deployed	Apr	Apr	Apr	Apr	Apr	Apr	Apr
Month							
Year	2002	2002	2002	2002	2002	2002	2002
Total PCB	19	16	8.3	10	8.6	16	7.3
PCB ng/g	8.6	7.3	3.8	4.5	3.9	7.3	3.3
PCB 17	NR	NR	NR	NR	NR	NR	NR
PCB 18	1.3	1	0.52	0.62	0.62	0.99	0.51
PCB 28	1.4	1.1	0.65	1.3	0.72	1.1	0.65
PCB 31	1.3	1.1	0.55	0.9	0.7	1.1	0.65
PCB 33	1.5	0.93	0.53	0.78	0.6	0.92	0.54
PCB 44	0.7	0.48	0.29	0.34	0.29	0.45	0.25
PCB 49	0.37	0.24	< 0.18	< 0.15	0.13	0.25	< 0.1
PCB 52	0.89	0.62	0.38	0.41	0.38	0.59	0.3
PCB 66	0.54	0.42	0.25	0.44	0.28	0.48	0.25
PCB 70	0.9	0.64	0.42	0.53	0.42	0.66	0.35
PCB 74	0.43	0.28	< 0.18	0.28	0.18	0.26	0.16
PCB 82	0.22	0.18	0.1	0.11	0.097	0.2	0.077
PCB 87	0.56	0.54	0.32	0.3	0.25	0.48	0.21
PCB 95	0.71	0.59	0.39	0.37	0.34	0.53	0.29
PCB 99	0.39	0.31	0.2	0.22	0.2	0.31	0.16
PCB 101/90	0.96	0.81	0.48	0.48	0.46	0.83	0.37
PCB 105	0.6	0.59	0.36	0.35	0.3	0.64	0.27
PCB 110	1.4	1.2	0.68	0.67	0.6	1.2	0.5
PCB 118	1.3	1.3	0.75	0.79	0.65	1.2	0.61
PCB 128	0.22	0.23	< 0.18	0.16	0.12	0.32	0.12
PCB 138/163/164	1.3	1.4	0.71	0.7	0.61	1.5	0.54
PCB 149	0.65	0.64	0.34	0.32	0.3	0.64	0.25
PCB 151	0.16	0.16	< 0.18	< 0.16	< 0.099	0.13	< 0.1
PCB 153/132	1.2	1.2	0.63	0.62	0.54	1.3	0.48
PCB 156	< 0.14	< 0.14	< 0.18	< 0.15	< 0.098	0.13	< 0.1
PCB 158	0.17	0.14	0.075	0.074	0.065	0.17	0.052
PCB 170/190	< 0.14	< 0.14	< 0.18	< 0.15	< 0.098	0.16	< 0.1
PCB 171	< 0.14	< 0.14	< 0.18	< 0.16	< 0.099	< 0.088	< 0.1
PCB 177	< 0.14	< 0.14	< 0.18	< 0.16	< 0.099	< 0.088	< 0.1
PCB 180	0.16	0.16	< 0.18	< 0.16	< 0.099	0.22	< 0.1
PCB 183	< 0.14	< 0.14	< 0.18	< 0.15	< 0.098	< 0.087	< 0.1
PCB 187/159/182	< 0.14	< 0.14	< 0.18	< 0.15	< 0.098	0.14	< 0.1
PCB 191	< 0.14	< 0.14	< 0.18	< 0.16	< 0.099	< 0.088	< 0.1
PCB 194	< 0.14	< 0.14	< 0.18	< 0.16	< 0.099	< 0.088	< 0.1
PCB 195	< 0.28	< 0.28	< 0.36	< 0.31	< 0.2	< 0.18	< 0.21
PCB 199	< 0.11	< 0.11	< 0.14	< 0.12	< 0.074	< 0.066	< 0.077
PCB 205	< 0.14	< 0.14	< 0.18	< 0.16	< 0.099	< 0.088	< 0.1
PCB 206	< 0.14	< 0.14	< 0.18	< 0.16	< 0.098	< 0.087	< 0.1
PCB 208	< 0.14	< 0.14	< 0.18	< 0.16	< 0.099	< 0.088	< 0.1
PCB 209	< 0.14	< 0.14	< 0.18	< 0.15	< 0.098	< 0.087	< 0.1

Table 3

PEMD SIN Sample Description	105682 Airport Creek	105698 Kenai Dock	105699 ADF&G	105700 Pillars	105701 Hidden Creek	105702 Upstream River	105703 Moose River
#Days Deployed	30	30	30	30	30	30	30
Month	Jul	Jul	Jul	Jul	Jul	Jul	Jul
Year	2002	2002	2002	2002	2002	2002	2002
Total PCB	20	23	21	17	18	15	14
PCB ng/g	9.1	10.4	9.5	7.7	8.2	6.8	6.4
PCB 17	NR	NR	NR	NR	NR	NR	NR
PCB 18	0.92	1.3	1.4	1.2	1.2	1.1	0.75
PCB 28	1.2	2.3	2.3	2.3	2.2	2.7	1.9
PCB 31	1.1	1.9	1.9	1.8	2.1	2.1	1.4
PCB 33	1	1.7	1.7	1.6	1.6	1.8	1.2
PCB 44	0.67	0.74	0.53	0.5	0.51	0.48	0.44
PCB 49	0.31	0.46	0.33	0.31	0.27	0.21	0.23
PCB 52	0.97	0.95	0.78	0.71	0.66	0.54	0.49
PCB 66	0.64	0.69	0.7	0.59	0.77	0.59	0.57
PCB 70	0.86	1.1	0.92	0.79	0.78	0.71	0.73
PCB 74	0.35	0.61	0.41	0.36	0.35	0.33	0.37
PCB 82	0.28	0.24	0.22	0.14	0.16	0.15	0.19
PCB 87	0.58	0.73	0.58	0.41	0.44	0.29	0.34
PCB 95	1.1	0.75	0.62	0.56	0.58	0.39	0.39
PCB 99	0.49	0.54	0.37	0.37	0.34	0.27	0.32
PCB 101/90	1.3	1.1	0.97	0.78	0.79	0.47	0.6
PCB 105	0.47	0.54	0.6	0.48	0.57	0.35	0.43
PCB 110	1.7	1.3	1.3	1	1.2	0.66	0.84
PCB 118	1.1	1.3	1.4	1	1.3	0.73	0.95
PCB 128	0.19	0.3	0.3	0.21	0.22	0.21	0.25
PCB 138/163/164	1.4	1.3	1.3	0.92	1.2	0.67	0.88
PCB 149	0.98	0.83	0.68	0.47	0.6	0.34	0.43
PCB 151	0.28	0.3	0.15	< 0.12	< 0.16	< 0.15	< 0.11
PCB 153/132	1.5	1.4	1.3	0.86	1.1	0.62	0.78
PCB 156	< 0.12	0.18	< 0.1	< 0.12	< 0.16	< 0.15	< 0.11
PCB 158	0.14	0.15	0.15	0.09	0.11	0.074	0.098
PCB 170/190	0.29	0.31	0.12	0.12	< 0.16	< 0.15	0.35
PCB 171	< 0.12	0.15	< 0.1	< 0.12	< 0.16	< 0.15	< 0.11
PCB 177	< 0.12	0.19	< 0.1	< 0.12	< 0.16	< 0.15	< 0.11
PCB 180	0.27	0.26	0.13	< 0.12	< 0.16	< 0.15	< 0.11
PCB 183	< 0.12	0.19	< 0.1	< 0.12	< 0.16	< 0.15	< 0.11
PCB 187/159/182	0.21	0.26	0.12	< 0.12	< 0.16	< 0.15	< 0.11
PCB 191	< 0.12	0.13	< 0.1	< 0.12	< 0.16	< 0.15	< 0.11
PCB 194	< 0.12	< 0.092	< 0.1	< 0.12	< 0.16	< 0.15	< 0.11
PCB 195	< 0.24	< 0.18	< 0.2	< 0.23	< 0.32	< 0.3	< 0.22
PCB 199	< 0.089	< 0.069	< 0.076	< 0.088	< 0.12	< 0.11	< 0.081
PCB 205	< 0.12	< 0.092	< 0.1	< 0.12	< 0.16	< 0.15	< 0.11
PCB 206	< 0.12	< 0.092	< 0.1	< 0.12	< 0.16	< 0.15	< 0.11
PCB 208	< 0.12	< 0.092	< 0.1	< 0.12	< 0.16	< 0.15	< 0.11
PCB 209	< 0.12	< 0.091	< 0.1	< 0.12	< 0.16	< 0.15	< 0.11

Table 3

PEMD SIN Sample Description	105691 Lab Blank	105709 Lab Blank	105694 Method Blank	105710 Method Blank	105713 Std Check	105695 Spiked Blank	105711 Spiked Blank
#Days Deployed	0	0	NA	NA	NA	NA	NA
Month	Jul	Jul	NA	NA	NA	NA	NA
Year	2002	2002	NA	NA	NA	NA	NA
Total PCB	4.7	9.7	1.4	3.9	89	130	120
PCB ng/g	2.1	4.4	0.6	1.8	40.4	59.0	54.5
PCB 17	NR	NR	NR	NR	NR	NR	NR
PCB 18	0.32	0.79	0.15	0.28	2.6	3.6	4.1
PCB 28	0.46	1.8	0.23	0.89	2.5	3.9	4.7
PCB 31	0.31	1.3	0.15	0.64	2.1	3.5	4.1
PCB 33	0.36	1.1	0.17	0.49	2.5	3.6	4.2
PCB 44	0.16	0.26	< 0.091	< 0.11	2.2	2.8	3
PCB 49	< 0.13	< 0.12	< 0.091	< 0.11	2.1	2.3	2.6
PCB 52	0.19	0.32	< 0.091	0.12	2.4	3.1	3.2
PCB 66	0.17	0.29	< 0.091	0.13	< 0.4	< 0.99	< 0.54
PCB 70	0.22	0.37	< 0.091	0.15	2.5	3.5	3.6
PCB 74	< 0.13	0.19	< 0.092	< 0.11	2.5	3.5	3.5
PCB 82	0.053	0.074	< 0.023	0.029	0.061	0.93	1
PCB 87	0.16	0.21	< 0.092	< 0.11	2.6	3.4	3.6
PCB 95	0.18	0.26	0.07	0.1	1.1	1.6	1.7
PCB 99	0.14	0.15	< 0.091	< 0.11	2.5	3.2	3.3
PCB 101/90	0.24	0.31	0.099	0.14	2.8	3.9	4.1
PCB 105	0.16	0.24	0.083	0.12	0.62	1.2	1.2
PCB 110	0.32	0.46	0.11	0.17	2.5	3.8	4.1
PCB 118	0.41	0.54	0.15	0.25	2.4	3.9	4
PCB 128	< 0.13	< 0.12	< 0.092	< 0.11	2.5	3.9	3.9
PCB 138/163/164	0.36	0.48	0.16	0.21	2.6	4.2	4.1
PCB 149	0.18	0.23	< 0.092	< 0.11	2.4	3.6	3.7
PCB 151	< 0.13	< 0.12	< 0.092	< 0.11	2.4	3.2	3.4
PCB 153/132	0.33	0.43	< 0.14	0.18	3.8	5.7	5.7
PCB 156	< 0.13	< 0.12	< 0.091	< 0.11	2.7	3.6	3.6
PCB 158	0.044	0.049	< 0.023	< 0.028	0.63	0.92	0.91
PCB 170/190	0.14	< 0.12	< 0.091	< 0.11	2.5	3.6	3.4
PCB 171	< 0.13	< 0.12	< 0.092	< 0.11	2.7	3.6	3.4
PCB 177	< 0.13	< 0.12	< 0.092	< 0.11	2.5	3.5	3.5
PCB 180	< 0.13	< 0.12	< 0.092	< 0.11	2.5	3.9	3.7
PCB 183	< 0.13	< 0.12	< 0.091	< 0.11	2.5	3.4	3.4
PCB 187/159/182	< 0.13	< 0.12	< 0.091	< 0.11	2.7	3.7	3.6
PCB 191	< 0.13	< 0.12	< 0.092	< 0.11	2.5	3.6	3.5
PCB 194	< 0.13	< 0.12	< 0.092	< 0.11	2.4	3.7	NR
PCB 195	< 0.27	< 0.23	< 0.18	< 0.22	2.5	3.3	3.1
PCB 199	< 0.1	< 0.088	< 0.069	< 0.82	1.8	2.1	2.3
PCB 205	< 0.13	< 0.12	< 0.092	< 0.11	2.6	3.5	3.3
PCB 206	< 0.13	< 0.12	< 0.091	< 0.11	2.5	3.6	3.3
PCB 208	< 0.13	< 0.12	< 0.092	< 0.11	2.4	3.2	3.1
PCB 209	< 0.13	< 0.12	< 0.091	< 0.11	2.2	3	2.8

Table 3

PEMD SIN Sample Description	105704 Airport Creek	105705 Kenai Dock	105706 ADF%G	105707 Upstream River	105690 Field Blank	105693 Field Blank	105709 Field Blank
#Days Deployed	29	23	26	27	0	0	0
Month	Aug	Aug	Aug	Aug	Apr	Jul	Aug
Year	2002	2002	2002	2002	2002	2002	2002
Total PCB	21	17	14	17	13	4.4	13
PCB ng/g	9.5	7.7	6.4	7.7	5.9	2.0	5.9
PCB 17	NR	NR	NR	NR	NR	NR	NR
PCB 18	1.1	1.4	1.1	1.3	0.97	0.49	1.1
PCB 28	2.4	2.4	1.5	2.9	1.2	0.62	2.5
PCB 31	1.8	2	1.3	2.2	1.1	0.44	2
PCB 33	1.7	1.8	1.1	2	0.96	0.55	1.5
PCB 44	0.72	0.65	0.44	0.5	0.56	< 0.36	0.4
PCB 49	0.4	0.43	0.19	0.33	0.27	< 0.35	0.18
PCB 52	1	0.78	0.61	0.64	0.8	< 0.35	0.51
PCB 66	0.98	0.46	0.38	1	0.4	< 0.35	0.66
PCB 70	1.2	0.9	0.58	1.1	0.72	< 0.35	0.69
PCB 74	0.54	0.29	0.24	0.58	0.29	< 0.36	0.41
PCB 82	0.25	0.095	0.19	0.13	0.13	< 0.089	0.074
PCB 87	0.54	0.37	0.4	0.36	0.42	< 0.36	0.24
PCB 95	1	0.55	0.52	0.45	0.62	0.29	0.35
PCB 99	0.4	0.34	0.27	0.3	0.29	< 0.36	0.19
PCB 101/90	1.2	0.71	0.69	0.61	0.82	0.39	0.39
PCB 105	0.43	0.36	0.37	0.35	0.37	0.2	0.24
PCB 110	1.5	0.82	0.93	0.83	0.88	0.49	0.47
PCB 118	1	0.77	0.91	0.83	0.86	0.53	0.51
PCB 128	0.17	0.18	0.14	< 0.12	< 0.13	< 0.36	< 0.14
PCB 138/163/164	1.1	0.81	0.81	0.67	0.72	0.45	0.4
PCB 149	0.82	0.43	0.43	0.37	0.34	< 0.36	0.21
PCB 151	0.24	0.13	< 0.12	< 0.12	< 0.13	< 0.36	< 0.14
PCB 153/132	1.2	0.86	0.75	0.64	0.64	< 0.53	0.37
PCB 156	< 0.13	< 0.11	< 0.11	< 0.12	< 0.12	< 0.35	< 0.14
PCB 158	0.11	0.11	0.085	0.066	0.078	< 0.09	0.044
PCB 170/190	0.2	< 0.11	0.14	0.14	< 0.12	< 0.35	< 0.14
PCB 171	< 0.13	< 0.11	< 0.12	< 0.12	< 0.13	< 0.36	< 0.14
PCB 177	< 0.13	< 0.11	< 0.13	< 0.12	< 0.13	0.72	< 0.14
PCB 180	0.17	< 0.11	< 0.12	< 0.12	< 0.13	< 0.36	< 0.14
PCB 183	< 0.13	< 0.11	< 0.11	< 0.12	< 0.12	< 0.35	< 0.14
PCB 187/159/182	0.15	< 0.11	< 0.11	< 0.12	< 0.12	< 0.36	< 0.14
PCB 191	< 0.13	< 0.11	< 0.12	< 0.12	< 0.13	< 0.36	< 0.14
PCB 194	< 0.13	< 0.11	< 0.12	< 0.12	< 0.13	< 0.36	< 0.14
PCB 195	< 0.26	< 0.21	< 0.23	< 0.25	< 0.25	< 0.72	< 0.28
PCB 199	< 0.097	< 0.08	0.086	< 0.093	< 0.094	< 0.27	< 0.1
PCB 205	< 0.13	< 0.11	< 0.12	< 0.12	< 0.13	< 0.36	< 0.14
PCB 206	< 0.13	< 0.11	< 0.11	< 0.12	< 0.12	< 0.36	< 0.14
PCB 208	< 0.13	< 0.11	< 0.12	< 0.12	< 0.13	< 0.36	< 0.14
PCB 209	< 0.13	< 0.11	< 0.11	< 0.12	< 0.12	< 0.35	< 0.14

Table 3

PEMD SIN	105696	105712
Sample Description	Spiked Method	Spiked Method
#Days Deployed	NA	NA
Month	NA	NA
Year	NA	NA
Total PCB	86	110
PCB+A327 ng/g	39.1	50.0
PCB 17	NR	NR
PCB 18	1.7	3.2
PCB 28	2.1	4.1
PCB 31	1.7	3.4
PCB 33	2.2	3.6
PCB 44	2.2	2.6
PCB 49	2	2.3
PCB 52	2.1	2.8
PCB 66	0.12	< 0.54
PCB 70	2.4	3.3
PCB 74	2.5	3.4
PCB 82	0.67	0.8
PCB 87	2.4	3.1
PCB 95	1.2	1.3
PCB 99	2.4	3
PCB 101/90	2.5	3.3
PCB 105	0.68	0.9
PCB 110	2.5	3.2
PCB 118	2.6	3.3
PCB 128	2.4	3.3
PCB 138/163/164	2.5	3.5
PCB 149	2.5	3.1
PCB 151	2.4	2.9
PCB 153/132	3.7	5
PCB 156	2.4	3.4
PCB 158	0.66	0.84
PCB 170/190	2.5	3.1
PCB 171	2.4	3.3
PCB 177	2.5	3.2
PCB 180	2.6	3.3
PCB 183	2.4	3.1
PCB 187/159/182	2.5	3.5
PCB 191	2.5	3.2
PCB 194	2.7	3
PCB 195	2.4	3.1
PCB 199	1.8	2
PCB 205	2.8	3.2
PCB 206	2.8	3
PCB 208	2.4	3
PCB 209	2.8	2.6

Table 3

PEMD SIN Sample Description	105683 Airport Creek	106684 Kenai Dock	106685 Pillars	105686 Moose River	105687 Bing's Landing	105688 Mile 44.5	105689 Hidden Creek
#Days Deployed	21	21	21	21	21	21	21
Month	Apr	Apr	Apr	Apr	Apr	Apr	Apr
Year	2002	2002	2002	2002	2002	2002	2002
HCB	1.8	2.8	0.53	0.33	1.3	1.4	0.88
α - HCH	NR	NR	NR	NR	NR	NR	NR
β - HCH	NR	NR	NR	NR	NR	NR	NR
Lindane	NR	NR	NR	NR	NR	NR	NR
Aldrin	0.58	< 0.14	< 0.18	< 0.16	< 0.099	< 0.088	< 0.1
Dieldrin	NR	NR	NR	NR	NR	NR	NR
Endosulfan I	< 0.37	< 0.37	< 0.47	< 0.41	< 0.26	< 0.23	< 0.27
Endosulfan II	< 1.2	< 1.2	< 1.6	< 1.1	< 0.87	< 0.77	< 0.91
Endosulfan							
Sulphate	< 0.14	< 0.14	< 0.18	< 0.16	0.33	0.15	0.31
Mirex	NR	< 0.14	NR	< 0.16	< 0.098	< 0.087	< 0.1
Heptachlor	< 0.14	< 0.14	< 0.18	< 0.15	< 0.097	< 0.087	< 0.1
Heptachlor							
Epoxide	< 0.14	< 0.14	< 0.18	< 0.15	< 0.097	< 0.087	< 0.1
Oxychlordane	NR	NR	NR	NR	NR	NR	NR
γ - Chlordane	< 0.14	< 0.14	< 0.18	< 0.16	< 0.1	< 0.089	< 0.11
α -Chlordane	< 0.14	< 0.14	< 0.18	< 0.15	0.11	0.15	< 0.1
trans-Nonachlor	< 0.14	< 0.14	< 0.18	< 0.16	0.11	0.12	< 0.1
cis- Nonachlor	< 0.14	< 0.14	< 0.18	< 0.16	< 0.1	< 0.089	< 0.1
Nonachlor III	< 0.14	< 0.14	< 0.18	< 0.16	< 0.098	< 0.087	< 0.1
α,p' -DDE	NR	NR	< 0.18	< 0.15	0.22	0.25	0.12
p,p' - DDE	NR	NR	NR	< 0.15	0.16	0.18	0.11
α,p' - DDD	NR	NR	< 0.18	< 0.15	< 0.097	NR	< 0.1
p,p' - DDD	18	0.48	0.56	< 0.16	NR	NR	0.14
α,p' - DDT	NR	NR	< 0.18	< 0.15	< 0.097	NR	NR
p,p' - DDT	< 0.14	< 0.14	< 0.18	< 0.15	< 0.097	< 0.086	< 0.1

Table 3

PEMD SIN Sample Description	105682 Airport Creek	105698 Kenai Dock	105699 ADF&G	105700 Pillars	105701 Hidden Creek	105702 Upstream River	105703 Moose River
#Days Deployed Month Year	30 Jul 2002	30 Jul 2002	30 Jul 2002	30 Jul 2002	30 Jul 2002	30 Jul 2002	30 Jul 2002
HCB	1.4	3.8	3.2	2.7	2	2.4	0.56
α - HCH	NR	NR	NR	NR	NR	NR	NR
β - HCH	NR	NR	NR	NR	NR	NR	NR
Lindane	NR	NR	NR	NR	NR	NR	NR
Aldrin	0.55	0.46	< 0.1	< 0.12	< 0.16	< 0.15	< 0.11
Dieldrin	NR	NR	NR	NR	NR	NR	NR
Endosulfan I	< 0.31	< 0.24	< 0.26	< 0.3	< 0.42	< 0.39	< 0.28
Endosulfan II	<1	< 0.81	< 0.89	<1	< 1.4	< 1.3	< 0.94
Endosulfan							
Sulphate	< 0.12	3.9	< 0.1	2.2	3.8	2.7	1.1
Mirex	NR	NR	< 0.1	< 0.12	< 0.16	< 0.15	< 0.11
Heptachlor	< 0.12	< 0.091	< 0.1	< 0.12	< 0.16	< 0.15	< 0.11
Heptachlor							
Epoxide	< 0.12	1.1	0.19	0.18	< 0.16	0.17	< 0.11
Oxychlordane	NR	NR	NR	NR	NR	NR	NR
γ - Chlordane	< 0.12	0.85	0.11	< 0.12	< 0.16	< 0.15	< 0.11
α -Chlordane	0.14	1.1	0.26	0.25	0.22	0.2	< 0.11
trans-Nonachlor	< 0.12	1.1	0.21	0.21	0.25	< 0.15	< 0.11
cis- Nonachlor	< 0.12	0.93	< 0.1	< 0.12	< 0.16	< 0.15	< 0.11
Nonachlor III	< 0.12	< 0.092	< 0.1	< 0.12	< 0.16	< 0.15	< 0.11
α,p' -DDE	NR	1.5	0.16	NR	< 0.16	< 0.15	< 0.11
p,p' - DDE	NR	2.6	0.51	NR	0.87	< 0.15	< 0.11
α,p' - DDD	NR	NR	< 0.1	< 0.12	NR	< 0.15	NR
p,p' - DDD	8.7	2.1	0.54	1.4	0.69	< 0.15	NR
α,p' - DDT	NR	NR	< 0.099	< 0.11	< 0.16	< 0.15	< 0.11
p,p' - DDT	< 0.12	< 0.091	< 0.099	< 0.11	< 0.16	< 0.15	< 0.11

Table 3

80

PEMD SIN Sample Description	105704 Airport Creek	105705 Kenai Dock	105706 ADF%G	105707 Upstream River	105690 Field Blank	105693 Field Blank	105709 Field Blank
#Days Deployed	29	23	26	27	0	0	0
Month	Aug	Aug	Aug	Aug	Apr	Jul	Aug
Year	2002	2002	2002	2002	2002	2002	2002
HCB	1.2	3.5	2.4	2.3	< 0.12	< 0.35	< 0.14
α - HCH	NR	NR	NR	NR	NR	NR	NR
β - HCH	NR	NR	NR	NR	NR	NR	NR
Lindane	NR	NR	NR	NR	NR	NR	NR
Aldrin	0.5	0.88	< 0.12	< 0.12	< 0.13	< 0.36	< 0.14
Dieldrin	NR	NR	NR	NR	NR	NR	NR
Endosulfan I	< 0.34	< 0.28	< 0.3	< 0.32	< 0.33	< 0.77	< 0.36
Endosulfan II	< 1.1	< 0.94	< 1	< 1.1	1.5	< 2.4	< 1.2
Endosulfan							
Sulphate	3.8	< 0.11	< 0.12	0.25	< 0.13	1.8	< 0.14
Mirex	NR	< 0.11	NR	Nr	< 0.12	< 0.36	< 0.14
Heptachlor	< 0.13	< 0.11	< 0.11	< 0.12	< 0.12	< 0.35	< 0.14
Heptachlor							
Epoxide	< 0.13	0.25	0.22	0.22	< 0.12	< 0.35	< 0.14
Oxychlordane	NR	NR	NR	NR	NR	NR	NR
γ - Chlordane	< 0.13	0.17	< 0.12	< 0.13	< 0.13	< 0.37	< 0.14
α -Chlordane	0.14	0.52	0.25	0.22	< 0.12	< 0.35	< 0.14
trans-Nonachlor	< 0.13	0.56	0.19	0.14	< 0.12	< 0.36	< 0.14
cis- Nonachlor	< 0.13	0.16	< 0.12	< 0.12	< 0.13	< 0.36	< 0.14
Nonachlor III	< 0.13	< 0.11	< 0.11	< 0.12	< 0.12	< 0.36	< 0.14
α,p' -DDE	< 0.13	0.69	< 0.11	< 0.12	< 0.12	< 0.35	< 0.14
p,p' - DDE	NR	1.5	0.33	0.18	< 0.12	< 0.35	< 0.14
α,p' - DDD	NR	< 0.11	NR	NR	< 0.12	< 0.35	< 0.14
p,p' - DDD	10	< 0.11	NR	0.21	< 0.12	< 0.36	< 0.14
α,p' - DDT	NR	< 0.1	< 0.11	< 0.12	< 0.12	< 0.35	< 0.14
p,p' - DDT	< 0.13	< 0.11	< 0.11	< 0.12	< 0.12	< 0.35	< 0.14

Table 3

PEMD SIN Sample Description	105691 Lab Blank	105709 Lab Blank	105694 Method Blank	105710 Method Blank	105713 Std Check	105695 Spiked Blank	105711 Spiked Blank
#Days Deployed	0	0	NA	NA	NA	NA	NA
Month	Jul	Jul	NA	NA	NA	NA	NA
Year	2002	2002	NA	NA	NA	NA	NA
HCB	< 0.13	< 0.12	< 0.091	< 0.11	12	10	10
α - HCH	NR	< 0.12	< 0.093	< 0.11	13	9.8	11
β - HCH	NR	< 0.12	< 0.094	< 0.11	13	9.9	11
Lindane	NR	< 0.12	< 0.091	< 0.11	12	10	11
Aldrin	< 0.13	< 0.12	< 0.092	< 0.11	12	11	12
Dieldrin	NR	NR	< 0.24	< 0.28	13	11	16
Endosulfan I	< 0.28	< 0.31	< 0.24	< 0.29	13	11	14
Endosulfan II	< 0.9	< 1	< 0.81	< 0.97	14	13	14
Endosulfan							
Sulphate	< 0.13	< 0.12	< 0.092	< 0.11	15	13	20
Mirex	< 0.13	< 0.12	< 0.092	< 0.11	11	12	12
Heptachlor	< 0.13	< 0.12	< 0.091	< 0.11	13	9.5	11
Heptachlor							
Epoxide	< 0.13	< 0.12	< 0.091	< 0.11	13	11	13
Oxychlordane	NR	NR	NR	NR	13	11	14
γ - Chlordane	< 0.14	< 0.12	< 0.094	< 0.11	13	12	13
α - Chlordane	< 0.13	< 0.12	< 0.091	< 0.11	12	11	13
trans-Nonachlor	< 0.13	< 0.12	< 0.091	< 0.11	12	11	13
cis- Nonachlor	< 0.13	< 0.12	< 0.093	< 0.11	13	12	15
Nonachlor III	< 0.13	< 0.12	< 0.091	< 0.11	< 0.4	< 0.99	< 0.54
α,p' - DDE	< 0.13	< 0.12	< 0.091	< 0.11	12	12	14
p,p' - DDE	< 0.13	< 0.12	< 0.091	< 0.11	12	13	14
α,p' - DDD	< 0.13	< 0.12	< 0.091	< 0.11	13	11	15
p,p' - DDD	< 0.13	< 0.12	< 0.092	< 0.11	13	12	16
α,p' - DDT	< 0.13	< 0.11	< 0.09	< 0.11	13	11	14
p,p' - DDT	< 0.13	< 0.11	< 0.091	< 0.11	13	12	16

Table 3

PEMD SIN	105696	105712
Sample	Spiked	Spiked
Description	Method	Method
#Days Deployed	NA	NA
Month	NA	NA
Year	NA	NA
HCB	4.5	11
α - HCH	7.9	12
β - HCH	11	12
Lindane	9.5	12
Aldrin	10	12
Dieldrin	12	14
Endosulfan I	11	14
Endosulfan II	8.4	15
Endosulfan		
Sulphate	13	21
Mirex	14	12
Heptachlor	10	13
Heptachlor		
Epoxide	13	13
Oxychlordane	12	14
γ - Chlordane	13	13
α -Chlordane	12	13
trans-Nonachlor	12	13
cis- Nonachlor	14	15
Nonachlor III	< 0.027	< 0.55
α,p' -DDE	12	14
p,p' - DDE	13	14
α,p' - DDD	14	15
p,p' - DDD	16	16
α,p' - DDT	15	14
p,p' - DDT	19	16

Table 3

Tissue SIN	105656	105657	105658	105659	105662	106660	106661
Sample	Chinook						
Description	Eggs						
Year	2002	2002	2002	2002	2002	2002	2002
Length (cm)	94	107	104	91	112	119	112
Weight (kg)	12.3	15.9	16.3	16.3	18.2	18.6	20.4
Fish Age	1.2	1.3	1.3	1.2	1.4	1.3	1.4
Sample Wt	2.53	2.57	2.55	2.47	2.43	2.51	2.47
Total PCB	10	13	10	8.8	9.8	9.1	9.2
PCB 17	0.15	0.14	0.14	0.13	0.14	0.15	0.13
PCB 18	0.38	0.36	0.36	0.33	0.34	0.36	0.33
PCB 28	0.46	0.53	0.49	0.48	0.49	0.46	0.49
PCB 31	0.43	0.46	0.46	0.45	0.44	0.44	0.45
PCB 33	0.28	0.28	0.29	0.31	0.3	0.29	0.29
PCB 44	0.36	0.43	0.38	0.34	0.34	0.34	0.33
PCB 49	0.2	0.26	0.22	0.19	0.18	0.19	0.19
PCB 52	0.72	0.89	0.73	0.64	0.65	0.67	0.67
PCB 66	0.32	0.39	0.32	0.33	0.3	0.29	0.3
PCB 70	0.51	0.61	0.52	0.49	0.47	0.45	0.48
PCB 74	0.24	0.31	0.25	0.23	0.24	0.23	0.23
PCB 82	0.078	0.089	0.081	0.055	0.067	0.068	0.061
PCB 87	0.38	0.42	0.35	0.29	0.33	0.3	0.32
PCB 95	0.68	0.86	0.7	0.59	0.64	0.62	0.65
PCB 99	0.39	0.51	0.39	0.31	0.39	0.34	0.35
PCB 101/90	0.87	1.2	0.9	0.74	0.86	0.8	0.82
PCB 105	0.28	0.3	0.26	0.22	0.24	0.22	0.22
PCB 110	0.65	0.76	0.63	0.53	0.56	0.57	0.56
PCB 118	0.64	0.72	0.61	0.5	0.57	0.51	0.51
PCB 128	< 0.14	< 0.15	< 0.13	< 0.12	< 0.14	< 0.12	< 0.12
PCB 138/163/164	0.85	1	0.77	0.63	0.77	0.67	0.65
PCB 149	0.55	0.69	0.56	0.42	0.51	0.45	0.46
PCB 151	0.17	0.22	0.17	0.14	0.17	0.14	0.15
PCB 153/132	0.96	1.2	0.9	0.7	0.88	0.74	0.75
PCB 156	< 0.13	< 0.15	< 0.13	< 0.12	< 0.14	< 0.12	< 0.12
PCB 158	0.051	0.051	0.045	0.04	0.045	0.039	0.038
PCB 170/190	< 0.13	< 0.15	< 0.13	< 0.12	< 0.14	< 0.12	< 0.12
PCB 171	< 0.13	< 0.15	< 0.13	< 0.12	< 0.14	< 0.12	< 0.12
PCB 177	< 0.13	< 0.15	< 0.13	< 0.12	< 0.14	< 0.12	< 0.12
PCB 180	< 0.14	0.16	< 0.13	< 0.12	< 0.14	< 0.12	< 0.12
PCB 183	< 0.13	< 0.15	< 0.13	< 0.12	< 0.14	< 0.12	< 0.12
PCB 187/159/182	0.15	0.2	0.14	< 0.12	0.15	< 0.12	0.12
PCB 191	< 0.14	< 0.15	< 0.13	< 0.12	< 0.14	< 0.12	< 0.12
PCB 194	< 0.14	< 0.16	< 0.13	< 0.12	< 0.14	< 0.12	< 0.12
PCB 195	< 0.14	< 0.16	< 0.13	< 0.12	< 0.14	< 0.12	< 0.12
PCB 199	< 0.1	< 0.12	< 0.097	< 0.09	< 0.11	< 0.087	< 0.087
PCB 205	< 0.14	< 0.16	< 0.13	< 0.12	< 0.14	< 0.12	< 0.12
PCB 206	< 0.14	< 0.15	< 0.13	< 0.12	< 0.14	< 0.12	< 0.12
PCB 208	< 0.14	< 0.15	< 0.13	< 0.12	< 0.14	< 0.12	< 0.12
PCB 209	< 0.13	< 0.15	< 0.13	< 0.12	< 0.14	< 0.12	< 0.12

Table 3

Tissue SIN	106663	105664	105651	105641	105642	105643	106650
Sample	Chinook						
Description	Eggs	Eggs	Eggs	Muscle	Muscle	Muscle	Muscle
Year	2002	2002	2002	2002	2002	2002	2002
Length (cm)	114	114	127	94	107	104	104
Weight (kg)	22.7	22.7	27.2	12.3	15.9	16.3	16.3
Fish Age	1.4	1.4	1.4	1.2	1.3	1.3	1.3
Sample Wt	2.47	2.48	2.64	3.11	3.03	2.64	3.06
Total PCB	9.9	9.5	8.5	12	9.1	5.8	9.7
PCB 17	0.15	0.13	0.13	0.13	0.112	0.11	0.13
PCB 18	0.37	0.34	0.3	0.34	0.331	0.27	0.29
PCB 28	0.51	0.47	0.44	0.48	0.339	0.34	0.47
PCB 31	0.47	0.45	0.42	0.42	0.547	0.31	0.4
PCB 33	0.32	0.28	0.26	0.24	< 0.284	0.23	0.25
PCB 44	0.37	0.36	0.3	0.38	0.305	0.21	0.29
PCB 49	0.19	0.2	0.19	0.26	< 0.285	< 0.12	0.19
PCB 52	0.7	0.69	0.59	0.78	0.586	0.38	0.59
PCB 66	0.33	0.3	0.27	0.55	0.306	0.19	0.28
PCB 70	0.51	0.49	0.42	0.56	0.502	0.29	0.44
PCB 74	0.25	0.25	0.19	0.27	< 0.287	0.15	0.21
PCB 82	0.084	0.075	0.06	0.08	< 0.19	0.044	0.063
PCB 87	0.35	0.33	0.29	0.4	0.345	0.21	0.31
PCB 95	0.7	0.69	0.53	0.73	0.634	0.39	0.58
PCB 99	0.37	0.36	0.32	0.48	0.423	0.23	0.38
PCB 101/90	0.87	0.86	0.73	1.1	0.831	0.49	0.85
PCB 105	0.25	0.21	0.19	0.27	0.35	0.15	0.22
PCB 110	0.61	0.57	0.53	0.66	0.591	0.35	0.54
PCB 118	0.57	0.57	0.46	0.75	0.698	0.37	0.57
PCB 128	< 0.15	< 0.13	0.075	0.12	< 0.287	< 0.12	0.093
PCB 138/163/164	0.74	0.68	0.6	0.1	0.938	0.46	0.8
PCB 149	0.51	0.51	0.44	0.7	0.576	0.31	0.54
PCB 151	0.17	0.16	0.13	0.2	< 0.287	< 0.12	0.17
PCB 153/132	0.83	0.79	0.72	1.3	1.09	0.56	1
PCB 156	< 0.15	< 0.13	< 0.062	< 0.097	< 0.285	< 0.12	< 0.083
PCB 158	0.043	0.04	0.032	0.05	< 0.072	< 0.031	0.038
PCB 170/190	< 0.15	< 0.13	< 0.062	< 0.097	< 0.284	< 0.12	< 0.083
PCB 171	< 0.15	< 0.13	< 0.063	< 0.098	< 0.287	< 0.12	< 0.084
PCB 177	< 0.15	< 0.13	< 0.063	< 0.098	< 0.287	< 0.12	< 0.084
PCB 180	< 0.15	< 0.13	0.086	0.19	< 0.287	< 0.12	0.14
PCB 183	< 0.15	< 0.13	< 0.062	< 0.097	< 0.284	< 0.12	< 0.083
PCB 187/159/182	< 0.15	< 0.13	0.098	0.2	< 0.285	< 0.12	0.16
PCB 191	< 0.15	< 0.13	< 0.063	< 0.098	< 0.287	< 0.12	< 0.084
PCB 194	< 0.15	< 0.13	< 0.063	< 0.098	< 0.288	< 0.12	< 0.084
PCB 195	< 0.15	< 0.13	< 0.063	< 0.099	< 0.288	< 0.12	< 0.084
PCB 199	< 0.11	< 0.098	< 0.047	< 0.074	< 0.216	< 0.093	< 0.063
PCB 205	< 0.15	< 0.13	< 0.063	< 0.098	< 0.288	< 0.12	< 0.084
PCB 206	< 0.15	< 0.13	< 0.062	< 0.098	< 0.285	< 0.12	< 0.083
PCB 208	< 0.15	< 0.13	< 0.063	< 0.098	< 0.287	< 0.12	< 0.084
PCB 209	< 0.15	< 0.13	< 0.062	< 0.097	< 0.285	< 0.12	< 0.083

Table 3

Tissue SIN	105644	105645	105646	105647	105648	105649	105653
Sample	Chinook	Chinook	Chinook	Chinook	Chinook	Chinook	Method
Description	Muscle	Muscle	Muscle	Muscle	Muscle	Muscle	Blank
Year	2002	2002	2002	2002	2002	2002	2002
Length (cm)	91	112	119	112	114	127	
Weight (kg)	16.3	18.2	18.6	20.4	22.7	27.2	
Fish Age	1.2	1.4	1.3	1.4	1.4	1.4	
Sample Wt	2.69	3.06	3.03	2.84	2.75	2.53	2.85
Total PCB	27	11	428	725	14	10	1.1
PCB 17	0.16	0.12	0.083	0.1	0.14	0.12	0.046
PCB 18	0.4	0.28	0.19	0.28	0.36	0.3	0.11
PCB 28	0.6	0.42	0.27	0.38	0.59	0.45	0.14
PCB 31	0.55	0.37	0.23	0.31	0.5	0.38	0.12
PCB 33	0.3	23	0.17	0.25	0.3	0.24	0.11
PCB 44	0.43	0.31	0.15	0.26	0.42	0.34	< 0.091
PCB 49	0.31	0.2	0.084	< 0.16	0.3	0.21	< 0.091
PCB 52	0.92	0.62	0.29	0.49	0.91	0.69	< 0.091
PCB 66	0.4	0.29	0.14	0.25	0.42	0.3	< 0.091
PCB 70	0.64	0.46	0.21	0.38	0.63	0.47	< 0.091
PCB 74	0.3	0.23	0.11	0.2	0.31	0.24	< 0.091
PCB 82	0.076	0.066	0.035	0.062	0.088	0.071	< 0.091
PCB 87	0.44	0.34	0.15	0.28	0.45	0.34	< 0.091
PCB 95	0.81	0.61	0.27	0.53	0.85	0.66	< 0.091
PCB 99	0.54	0.45	0.16	0.3	0.55	0.41	< 0.091
PCB 101/90	1.2	0.97	0.37	0.66	1.3	0.96	0.11
PCB 105	0.29	0.23	0.13	0.19	0.29	0.22	0.06
PCB 110	0.74	0.57	0.28	0.51	0.74	0.58	0.11
PCB 118	0.8	0.65	0.29	0.51	0.8	0.64	0.099
PCB 128	0.12	0.11	< 0.058	< 0.16	0.13	< 0.11	< 0.091
PCB 138/163/164	1	0.91	0.37	0.61	1.1	0.83	0.13
PCB 149	0.77	0.62	0.24	0.43	0.78	0.59	< 0.091
PCB 151	0.21	0.19	0.072	< 0.16	0.24	0.18	< 0.091
PCB 153/132	1.3	1.2	0.42	0.75	1.4	1	< 0.14
PCB 156	< 0.087	< 0.092	< 0.058	< 0.16	< 0.11	< 0.11	< 0.091
PCB 158	0.047	0.044	0.022	< 0.041	0.048	0.04	< 0.023
PCB 170/190	< 0.087	< 0.092	< 0.058	< 0.16	< 0.11	< 0.11	< 0.091
PCB 171	< 0.087	< 0.093	< 0.058	< 0.16	< 0.11	< 0.11	< 0.091
PCB 177	< 0.087	< 0.093	< 0.058	< 0.16	< 0.11	< 0.11	< 0.091
PCB 180	0.16	0.17	0.068	< 0.16	0.18	0.15	< 0.091
PCB 183	< 0.087	< 0.092	< 0.058	< 0.16	< 0.11	< 0.11	< 0.091
PCB 187/159/182	0.18	0.19	0.071	< 0.16	0.2	0.16	< 0.091
PCB 191	< 0.087	< 0.093	< 0.058	< 0.16	< 0.11	< 0.11	< 0.091
PCB 194	8.3	< 0.093	< 0.058	< 0.17	< 0.11	< 0.11	< 0.092
PCB 195	< 0.088	< 0.093	< 0.059	< 0.17	< 0.11	< 0.11	< 0.092
PCB 199	5.6	< 0.069	< 0.049	< 0.12	< 0.08	< 0.08	< 0.069
PCB 205	< 0.088	< 0.093	< 0.058	< 0.17	< 0.11	< 0.11	< 0.092
PCB 206	< 0.087	< 0.092	< 0.058	< 0.16	< 0.11	< 0.11	< 0.091
PCB 208	< 0.087	< 0.093	< 0.058	< 0.16	< 0.11	< 0.11	< 0.091
PCB 209	< 0.087	< 0.092	< 0.058	< 0.16	< 0.11	< 0.11	< 0.091

Table 3

Tissue SIN	105666	105652	106665
Sample	Method		
Description	Blank	SRM 1974a	SRM 1974b
Year	2002		
Length (cm)			
Weight (kg)			
Fish Age			
Sample Wt	2.5	2.52	2.56
Total PCB	1.5	236	150
PCB 17	0.053	2.57	1.1
PCB 18	< 0.14	3.42	1
PCB 28	0.2	8.22	3.1
PCB 31	0.17	7.3	2.9
PCB 33	0.16	1.57	0.68
PCB 44	< 0.14	8.54	3.6
PCB 49	< 0.14	9.69	4.9
PCB 52	< 0.14	13.1	6.4
PCB 66	< 0.14	13.5	6.8
PCB 70	< 0.14	14	6.8
PCB 74	< 0.14	8.7	4.2
PCB 82	< 0.14	2.18	1.3
PCB 87	< 0.14	8.2	5.1
PCB 95	< 0.14	10.8	6.2
PCB 99	< 0.14	9.54	6.5
PCB 101/90	0.15	17.4	12
PCB 105	0.1	7.09	4.9
PCB 110	0.17	16.7	11
PCB 118	16	16.8	12
PCB 128	< 0.14	2.69	2.4
PCB 138/163/164	0.19	18.8	15
PCB 149	< 0.14	10.6	8
PCB 151	< 0.14	2.84	2.1
PCB 153/132	< 0.21	22.5	18
PCB 156	< 0.14	1.11	0.91
PCB 158	< 0.036	1.67	1.4
PCB 170/190	< 0.14	0.584	0.49
PCB 171	< 0.14	0.744	0.57
PCB 177	< 0.14	1.69	1.4
PCB 180	< 0.14	1.57	1.5
PCB 183	< 0.14	1.87	1.6
PCB 187/159/182	< 0.14	3.97	3.3
PCB 191	< 0.14	< 0.371	< 0.16
PCB 194	< 0.14	NR	< 0.16
PCB 195	< 0.14	< 0.372	< 0.16
PCB 199	< 0.14	< 0.278	< 0.12
PCB 205	< 0.14	< 0.371	< 0.16
PCB 206	< 0.14	< 0.368	< 0.16
PCB 208	< 0.14	< 0.371	< 0.16
PCB 209	< 0.14	< 0.367	< 0.16

Table 3

Tissue SIN	105656	105657	105658	105659	105662	106660	106661
Sample	Chinook						
Description	Eggs						
Year	2002	2002	2002	2002	2002	2002	2002
Length (cm)	94	107	104	91	112	119	112
Weight (kg)	12.3	15.9	16.3	16.3	18.2	18.6	20.4
Fish Age	1.2	1.3	1.3	1.2	1.4	1.3	1.4
Sample Wt	2.53	2.57	2.55	2.47	2.43	2.51	2.47
HCB	3.3	3.7	3.2	2.5	2.7	2.7	2.7
α - HCH	2.2	2.6	2.9	2.1	2.3	2	2.2
β - HCH	1.1	1.4	1.3	0.99	1.2	0.93	1
Lindane	0.31	0.41	0.46	0.31	0.42	0.32	0.34
Aldrin	< 0.14	< 0.15	< 0.13	< 0.12	< 0.14	< 0.12	< 0.12
Dieldrin	1.2	1.3	1.2	1.1	1	1.1	1
Endosulfan I	< 0.33	< 0.38	< 0.32	< 0.29	< 0.35	< 0.29	< 0.29
Endosulfan II	< 0.34	< 0.39	< 0.32	< 0.3	< 0.36	< 0.29	< 0.29
Endosulfan							
Sulphate	< 0.14	< 0.16	< 0.13	< 0.12	< 0.14	< 0.12	< 0.12
Mirex	< 0.14	< 0.15	< 0.13	< 0.12	< 0.14	< 0.12	< 0.12
Heptachlor	< 0.13	< 0.15	< 0.13	< 0.12	< 0.14	< 0.12	< 0.12
Heptachlor							
Epoxide	0.33	0.36	0.34	0.33	0.34	0.32	0.3
Oxychlordane	0.81	0.58	1.5	0.29	0.64	0.28	0.31
γ - Chlordane	0.39	0.54	0.36	0.29	0.31	0.38	0.33
α - Chlordane	1.3	1.6	1.2	0.9	0.98	1.2	1
trans-Nonachlor	1.3	1.8	1.3	1	1.2	1.1	1.2
cis- Nonachlor	0.42	0.56	0.41	0.3	0.35	0.32	0.34
Nonachlor III	0.22	0.3	0.22	0.17	0.21	0.19	0.2
o,p' - DDE	0.28	0.4	0.26	0.29	0.32	0.29	0.25
p,p' - DDE	6.4	12	4.7	5.5	5.8	6.1	6.1
o,p' - DDD	0.31	0.41	0.3	0.24	0.34	0.27	0.24
p,p' - DDD	1.6	2.6	1.4	1.3	1.1	1.4	1.4
o,p' - DDT	0.7	1.1	0.82	0.44	0.73	0.54	0.61
p,p' - DDT	1	1.8	1.1	0.7	0.8	0.8	1

Table 3

Tissue SIN	106663	105664	105651	105641	105642	105643	106650
Sample	Chinook						
Description	Eggs	Eggs	Eggs	Muscle	Muscle	Muscle	Muscle
Year	2002	2002	2002	2002	2002	2002	2002
Length (cm)	114	114	127	94	107	104	104
Weight (kg)	22.7	22.7	27.2	12.3	15.9	16.3	16.3
Fish Age	1.4	1.4	1.4	1.2	1.3	1.3	1.3
Sample Wt	2.47	2.48	2.64	3.11	3.03	2.64	3.06
HCB	2.9	3	2.4	3.4	2.03	1.5	2.2
α - HCH	2	2	2	1.7	0.931	0.87	1.4
β - HCH	0.95	0.98	1	1	0.72	0.52	0.89
Lindane	0.31	0.31	0.35	0.16	< 0.283	0.13	0.2
Aldrin	< 0.15	< 0.13	< 0.063	< 0.098	< 0.287	< 0.12	< 0.084
Dieldrin	0.93	1	0.97	1.1	0.788	0.47	0.83
Endosulfan I	< 0.37	< 0.32	< 0.15	< 0.24	< 0.768	< 0.31	< 0.21
Endosulfan II	< 0.38	< 0.33	< 0.16	< 0.24	< 0.78	< 0.31	< 0.21
Endosulfan							
Sulphate	< 0.15	< 0.13	< 0.063	< 0.099	< 0.288	< 0.13	< 0.084
Mirex	< 0.15	< 0.13	< 0.063	0.11	< 0.286	< 0.12	0.11
Heptachlor	< 0.15	< 0.13	< 0.062	< 0.097	< 0.284	< 0.12	< 0.053
Heptachlor							
Epoxide	0.31	0.31	0.3	0.32	< 0.284	0.16	0.23
Oxychlordane	0.3	< 0.13	0.19	< 0.099	< 0.775	< 0.13	0.25
γ - Chlordane	0.42	0.42	0.29	0.56	0.425	0.2	0.34
α - Chlordane	1.3	1.3	0.88	1.6	0.997	0.55	1
trans-Nonachlor	1.2	1.3	0.99	1.9	1.49	0.81	1.5
cis- Nonachlor	0.36	0.36	0.28	0.58	0.488	0.23	0.42
Nonachlor III	0.21	0.2	0.15	0.27	< 0.285	< 0.12	0.2
o,p' - DDE	0.22	0.22	0.18	0.29	0.316	0.14	0.2
p,p' - DDE	3.9	4	4.3	8.6	9.43	2.9	4.9
o,p' - DDD	0.32	0.3	0.22	0.33	0.327	0.14	0.26
p,p' - DDD	1.2	1.2	1.1	1.9	2.12	0.68	1.3
o,p' - DDT	0.66	0.66	0.46	0.7	0.663	0.29	0.64
p,p' - DDT	0.81	0.81	0.61	1.1	1.21	0.42	0.86

Table 3

Tissue SIN	105644	105645	105646	105647	105648	105649	105653
Sample	Chinook	Chinook	Chinook	Chinook	Chinook	Chinook	Method
Description	Muscle	Muscle	Muscle	Muscle	Muscle	Muscle	Blank
Year	2002	2002	2002	2002	2002	2002	2002
Length (cm)	91	112	119	112	114	127	
Weight (kg)	16.3	18.2	18.6	20.4	22.7	27.2	
Fish Age	1.2	1.4	1.3	1.4	1.4	1.4	
Sample Wt	2.69	3.06	3.03	2.84	2.75	2.53	2.85
HCB	3.6	2.3	0.95	1.8	3.4	2.9	< 0.09
α - HCH	2.2	1.4	0.47	0.1	1.3	1.7	< 0.09
β - HCH	1.1	0.9	0.2	0.51	0.95	1	< 0.09
Lindane	0.18	0.19	< 0.058	< 0.16	0.15	0.21	< 0.09
Aldrin	< 0.087	< 0.093	< 0.058	< 0.16	< 0.11	< 0.11	< 0.09
Dieldrin	1.6	0.87	0.34	0.65	1.2	1.1	< 0.09
Endosulfan I	< 0.21	< 0.23	< 0.14	< 0.41	< 0.26	< 0.26	< 0.09
Endosulfan II	< 0.22	< 0.23	< 0.15	< 0.41	< 0.26	< 0.27	< 0.09
Endosulfan							
Sulphate	< 0.088	< 0.093	< 0.059	< 0.17	< 0.11	< 0.11	< 0.09
Mirex	0.092	0.11	< 0.058	< 0.16	0.12	< 0.11	< 0.09
Heptachlor	< 0.086	< 0.092	< 0.058	< 0.16	< 0.11	< 0.11	< 0.09
Heptachlor							
Epoxide	0.49	0.28	0.1	0.22	0.37	0.34	< 0.09
Oxychlordane	3.9	0.21	0.092	0.2	0.32	< 0.11	< 0.09
γ - Chlordane	0.54	0.34	0.17	0.29	0.69	0.44	< 0.09
α - Chlordane	1.5	1	0.5	0.72	2	1.3	< 0.09
trans-Nonachlor	2	1.6	0.58	1.2	2.2	1.7	< 0.09
cis- Nonachlor	0.63	0.44	0.16	0.31	0.68	0.48	< 0.09
Nonachlor III	0.28	0.25	0.085	0.17	0.31	0.23	< 0.09
α,p' - DDE	0.5	0.3	0.12	0.21	0.26	0.23	< 0.09
p,p' - DDE	9.9	7.1	2.9	5.1	6.2	5.9	< 0.09
α,p' - DDD	0.38	0.34	0.085	0.2	0.48	0.24	< 0.09
p,p' - DDD	2.2	1.3	0.57	1.2	2	1.5	< 0.09
α,p' - DDT	0.75	0.84	0.18	0.39	1.1	0.57	< 0.09
p,p' - DDT	1.2	0.94	0.31	0.67	1.4	0.9	< 0.09

Table 3

Tissue SIN	105666	105652	10665
Sample	Method		
Description	Blank	SRM 1974a SRM 1974b	
Year	2002		
Length (cm)			
Weight (kg)			
Fish Age			
Sample Wt	2.5	2.52	2.56
HCB	< 0.14	< 0.365	< 0.16
α - HCH	< 0.14	< 0.373	0.29
β - HCH	< 0.14	0.498	0.28
Lindane	< 0.14	< 0.365	< 0.16
Aldrin	< 0.14	1.74	0.74
Dieldrin	< 0.14	< 0.965	0.63
Endosulfan I	< 0.14	< 0.991	< 0.4
Endosulfan II	< 0.14	< 1.01	< 0.41
Endosulfan			
Sulphate	< 0.14	< 0.372	< 0.17
Mirex	< 0.14	< 0.369	< 0.16
Heptachlor	< 0.14	< 0.366	< 0.16
Heptachlor			
Epoxide	< 0.14	< 0.366	< 0.16
Oxychlordane	< 0.14	< 0.099	< 0.17
γ - Chlordane	< 0.14	1.72	1.1
α -Chlordane	< 0.14	1.9	1.4
trans-Nonachlor	< 0.14	1.9	1.2
cis- Nonachlor	< 0.14	0.803	0.57
Nonachlor III	< 0.14	< 0.368	< 0.16
o,p' -DDE	< 0.14	< 0.378	0.27
p,p' - DDE	< 0.14	7.19	5.2
o,p' - DDD	< 0.14	1.77	2
p,p' - DDD	< 0.14	7.87	5.1
o,p' - DDT	< 0.14	< 0.363	< 0.16
p,p' - DDT	< 0.14	< 0.364	< 0.16